

SITE INSPECTION NARRATIVE REPORT  
BROCKWAY STANDARD INC.  
HIGHWAY 84 WEST  
HOMERVILLE, CLINCH COUNTY, GEORGIA  
EPA ID# GAD004060968

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11/21/1996

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September 30, 1996

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## **1.0 INTRODUCTION**

Under authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Environmental Protection Division (EPD), Hazardous Waste Management Branch conducted a Site Investigation (SI) at Brockway Standard Inc., Clinch County, Georgia. The purpose of this investigation was to collect information concerning conditions at the Brockway Standard site sufficient to assess the threat posed to human health and the environment and to determine the need for additional investigation under CERCLA or other authority, and, if appropriate, support site evaluation using the Hazard Ranking System (HRS) for proposal to the National Priorities List (NPL). The investigation included reviewing available file information, sampling environmental media to test preliminary assessment (PA) (Reference 1) hypotheses and to evaluate and document HRS factors, on-and off-site reconnaissance, and a comprehensive target survey.

## **2.0 SITE DESCRIPTION**

### **2.1 Location**

The site is located in north-central Clinch County in southeastern Georgia (Fig. 1). The site is located off of Highway 84 approximately three quarters of a mile west of the City of Homerville, Georgia (Reference 2). The geographical coordinates are 31°01'45" north latitude and 82°46'25" west longitude (Reference 3) and is located on the Homerville West, Georgia United States Geologic Survey (U.S.G.S.) 7.5 minute Topographic Quadrangle Map (Fig. 2)(Plate 1 Appendix I)(Reference 4).

The regional climate of the site is generally mild to hot with humid summers and cool winters. A review of thirty year average temperatures yields an average daily temperature of 81 degrees Fahrenheit during the summer months (Reference 1). Extreme high temperatures during the summer months can reach above 100 degrees, while extreme low temperatures during the winter months have historically been recorded near 0 degrees (Reference 1). The average annual precipitation is 52 inches (Reference 5).

### **2.2 Site Description**

The site occupies approximately 116 acres and has been owned and operated by Brockway since 1989. The site is located about three-quarters of a mile west of the City of Homerville, which is thirty-five (35) miles northeast of Valdosta, Georgia. The site is an active Resource Conservation and Recovery Act (RCRA) large quantity generator of hazardous waste. The facility does not have a Hazardous Waste Facility Permit. Facility operations are conducted in one of two production buildings which are both enclosed by a fence or partial fence: a large Assembly Building located south of Highway 84 is enclosed by a partial fence which is incomplete along the southern facility boundary where railroad tracks enter the facility property, and the Lithograph Building located north of Highway 84, which is completely fenced (Reference 3). A Materials Warehouse is connected to the east side of the Assembly Building. The assembly building/warehouse is bordered on the east by a pecan tree orchard. The Lithograph Building is bordered to the east by a cow pasture (Reference 2). A large pond into which the facility discharges waste water is located immediately west of the Assembly Building. A rinsewater/sludge pond, small ponds, and extensive wetlands exist immediately south and west of both

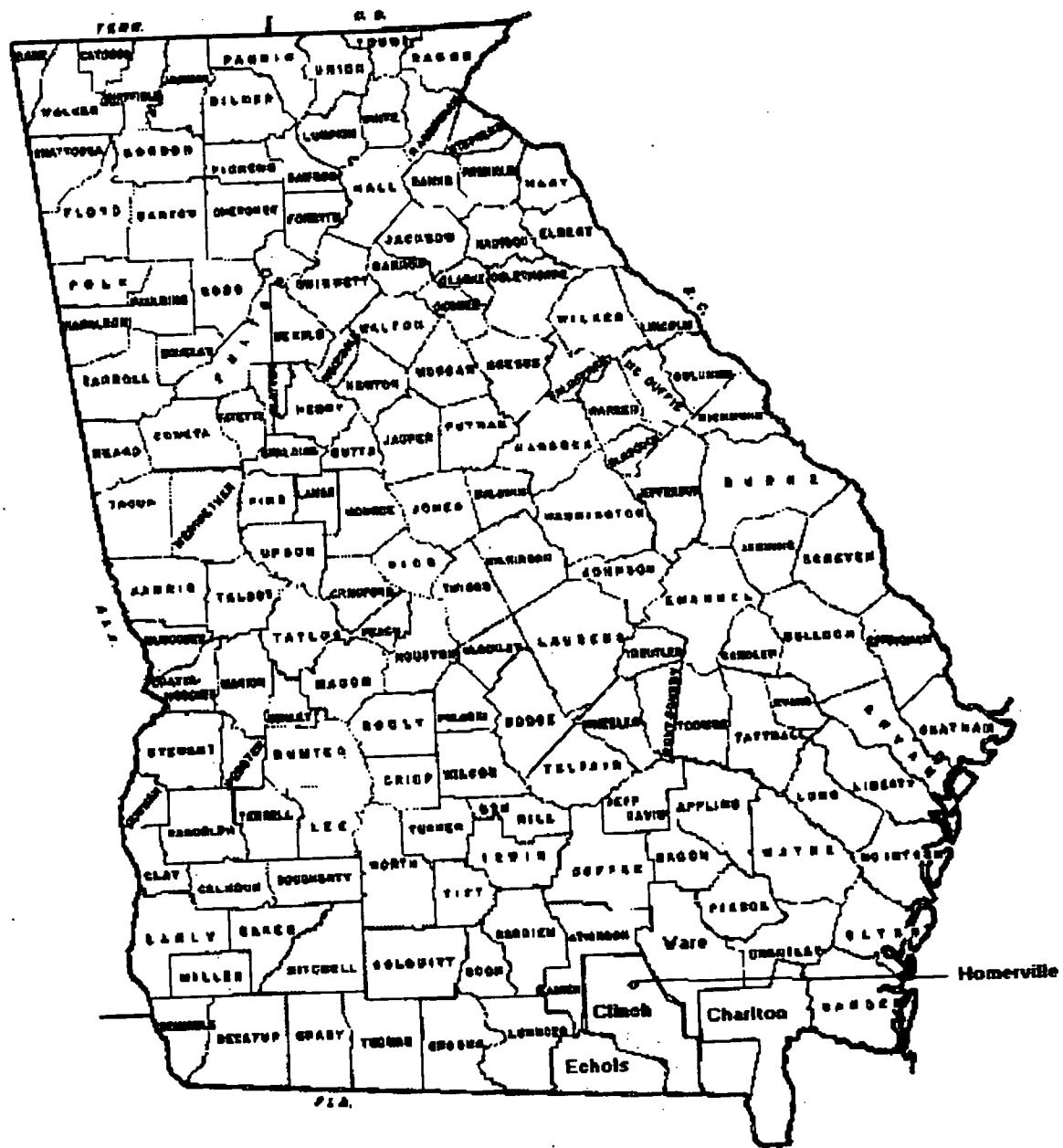


Figure 1. Location of Clinch County and Homerville, Georgia

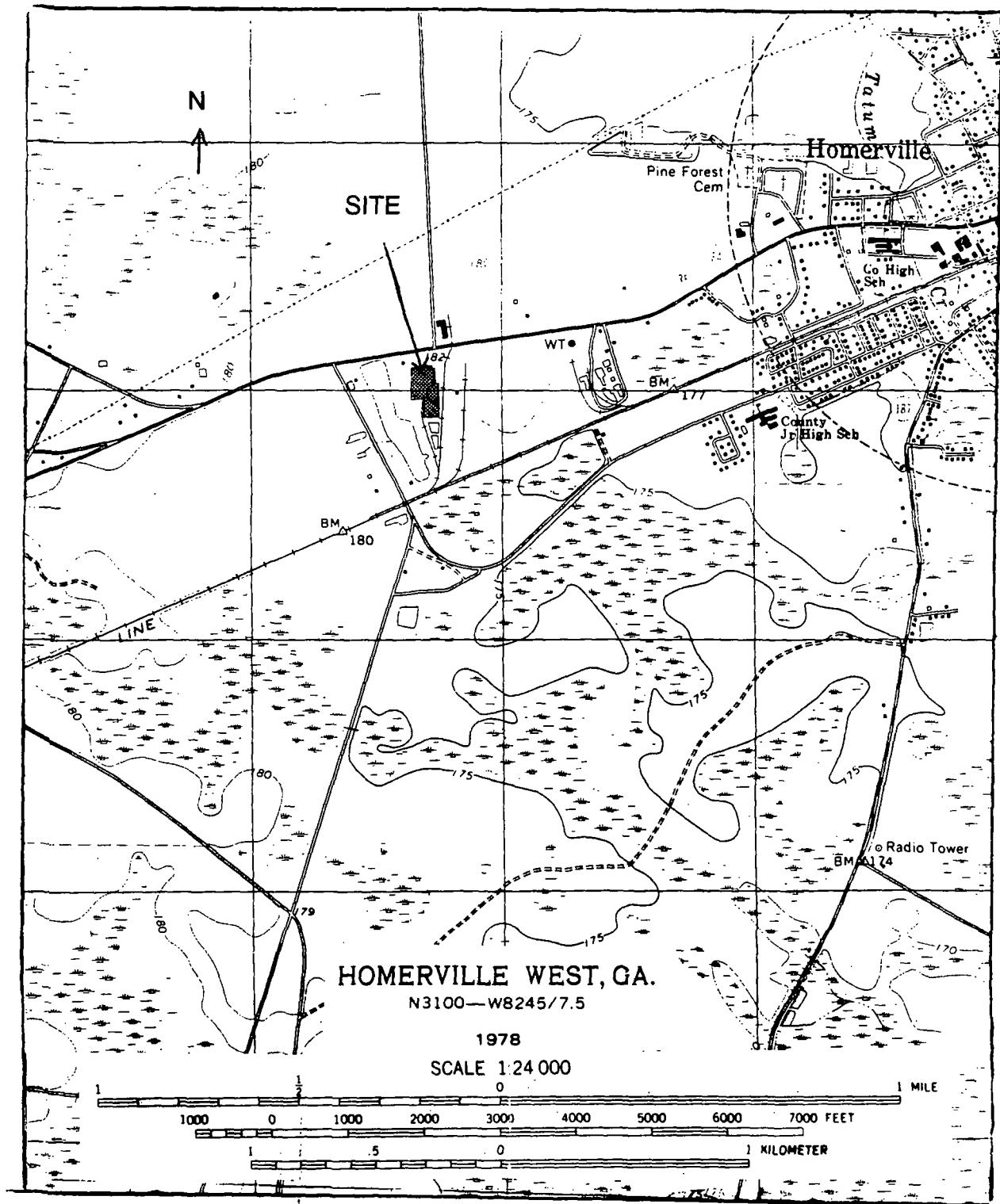


Figure 2. Location of Brockway-Standard Plant

the production buildings. The nearest residents are located on properties approximately 4/10 of a mile north of the site (Reference 2). Figure 3 illustrates the facility proper and adjacent properties.

## **2.3 Operational History and Waste Characteristics**

Prior to 1957, the land now included in the site was used for farming and timber operations. Operations involving the manufacturing of steel containers began at this site in 1957 under the ownership of Standard Container, Inc. Manufacturing operations have been conducted at the site under various owners since industrial activity commenced at the facility in 1957 (References 1 & 6). Prior to the current ownership, Owens Illinois operated a metal and plastic container manufacturing plant at the facility. In 1989, Brockway became Brockway-Standard, Inc. The facility has been owned and operated by Brockway-Standard since that time. The facility currently manufactures various sized steel containers and ammunition boxes. Manufacturing processes primarily consist of metal cutting, shaping, soldering, screen printing, and the packaging and shipping of finished products (Reference 1). Chemical products currently used or previously used and degradation products detected at the facility include: vinyl chloride, 1,1-dichloroethene, 1,1-dichloroethane, 1,1,1-trichloroethane, lead, chromium, arsenic, barium, nickel, cadmium, methyl ethyl ketone, isophorone, naphthalene, toluene, acetone, tetrachloroethylene, ethylbenzene, xylene, 1,2-dichloroethane, 1,1,2-trichloroethane, zinc, selenium, copper, methylene chloride, and cis/trans 1,2-dichloroethene (References 2,6,7,8,9).

Table 1 provides the toxicity, mobility, and bioaccumulation data for these constituents (Reference 10).

As documented by the site specific environmental inspections conducted by EPD, the manufacturing activities generate hazardous waste, including but not limited to spent solvents, lithographic paint wastes, metals, and mixed solvent wastes (References 2 and 7).

Previous investigations conducted at the site identified that surface soil, groundwater, surface water, and sediment have been contaminated as a result of manufacturing operations (References 8 and 9). The sources identified at the site are: (1) Lithographic Building Drum Cleanout Area; (2) Rinsewater/Sludge Pond; (3) Hazardous Wastes/Hazardous Materials Storage Areas; (4) NPDES Discharge Area from Assembly Building (Reference 2)(Fig. 4). Descriptions of these source areas follow:

### **2.3.1 Lithographic Building Drum Cleanout Area**

The Drum Cleanout Area (Photos #1 and #2, Appendix IV) consists of approximately sixty-six (66) square yards of soil. Chemical solvent and hydrocarbon constituents have been detected in soils and soil borings in this area. Past practices involved the cleanout of waste/chemical drums onto the ground surface. Fifty-three (53) square yards of impacted soils have been excavated to a depth of three (3) inches. The remaining thirteen (13) square yards have not been fully addressed. The area, while fenced from the general public, is not specifically fenced off to prevent workers from being exposed to any remaining contaminated soils.

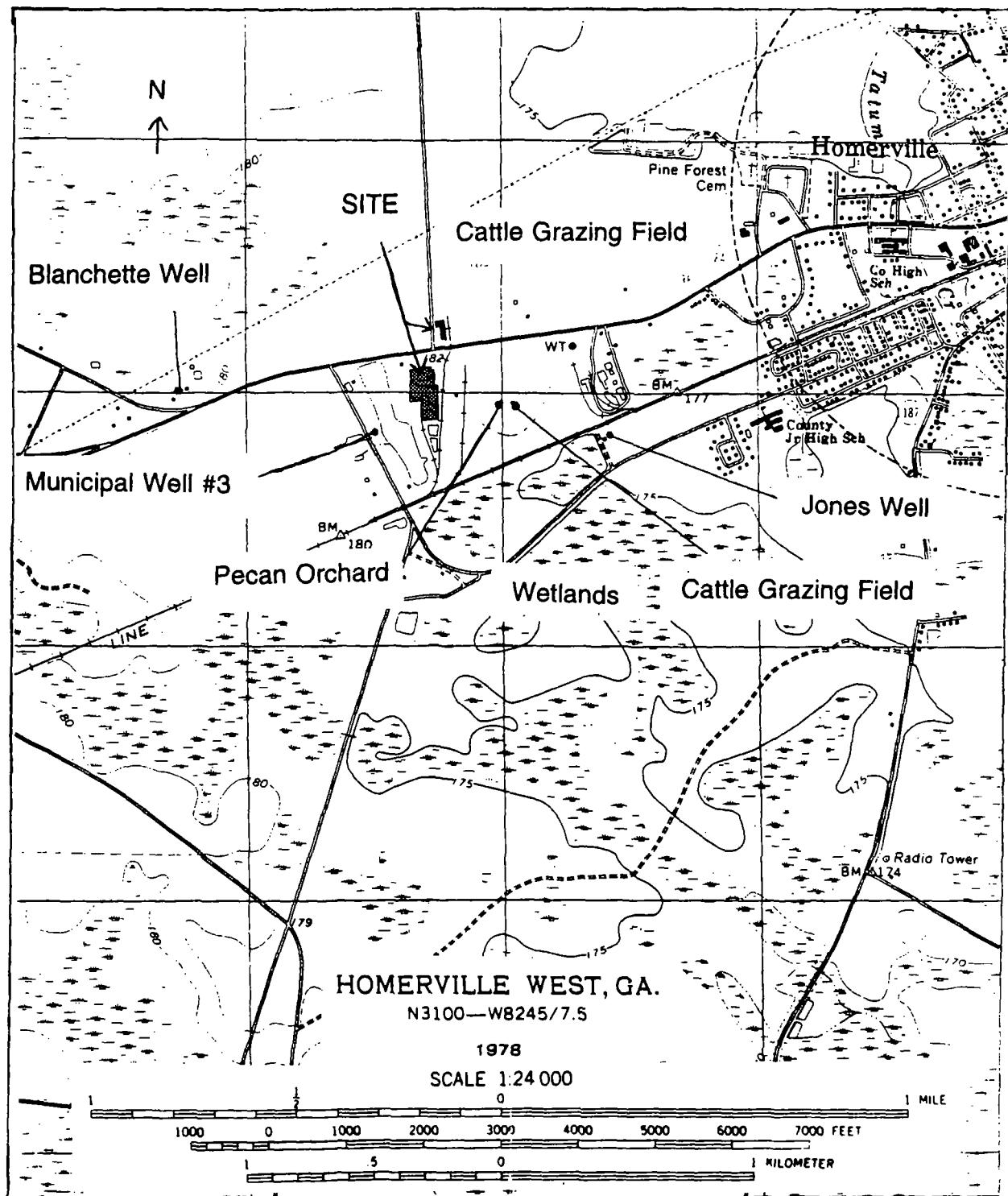


Figure 3. Brockway Standard Site Map

Site Name: Brockway StandardReferences: SCDM, Hawley Condensed Chemical Dictionary

## Sources:

1. Lithographic Bldg. Drum Cleanout Area (contaminated soil)
2. Area of Rinsewater/Sludge Pond
3. Hazardous Waste/Hazardous Materials Storage Areas
4. NPDES Discharge Area (Located from Assembly Building south to property boundary)

SOURCE	HAZARDOUS SUBSTANCE	TOXICITY	GROUND WATER PATHWAY		SURFACE WATER PATHWAY										
					OVERLAND/FLOOD MIGRATION						GROUND WATER TO SURFACE WATER				
			GW Mobility (HRS Table 3-8)	Tox/Mobility Value (HRS Table 3-9)	Per (HRS Tables 4-10 and 4-11)	Tox/Per Value (HRS Table 4-12)	Bioac Pot. (HRS Table 4-15)	Tox/pers/Bioac Value (HRS Table 4-16)	Ecotox (HRS Table 4-19)	Ecotox/Pers (HRS Table 4-20)	Ecotox/Pers/Bioac Value (HRS Table 4-21)	Tox/Mob/Pers Value (HRS Table 4-26)	Tox/Mob/Pers/Bioac Value (HRS Table 4-28)	Ecotox/Mob/Per Value (HRS Table 4-29)	Ecotox/Mob/Bioac Value (HRS Table 4-30)
3	Vinyl Chloride	10000	0.01	100.00	7.00e-04	7.0	5.0	35.0	-	-	-	7.00e-02	0.35	-	-
3	Dichloroethene, 1,1-	100	0.01	1.00	0.4	40.0	50.0	2.00e+03	10	4.00	200.00	4.00e-01	2.00e+02	0.04	2.00
3	Dichloroethane, 1,1-	10	1	10.00	0.4	4.0	5.0	20	-	-	-	4.00	20.00	-	-
3	Trichloroethane, 1,1,1-	1	0.01	0.01	0.4	0.40	5.0	2.00	10	4.00	20.00	4.00e-03	.02	0.04	0.20
3	Trichloroethylene	10	0.01	0.10	0.4	4.00	50.0	200	100	40.00	2.00e+03	0.04	2.00	0.40	20.00
2.4	Lead	10000	2.00e-05	0.5	1.0	10,000	5000.0	5.00e+07	1000	1.00e+03	5.00e+06	0.5	2.50e+03	0.05	250
2.4	Chromium	10000	0.01	100.00	1.0	10,000	5.0	5.00e+04	10000	1.00e+03	5.00e+04	100.00	500.00	100	500
2.4	Arsenic	10000	0.01	100.00	1.0	10,000	5.0	5.00e+04	10	10.00	50.00	100.00	500.00	0.10	0.50
2.4	Barium	10000	0.01	100.00	1.0	10,000	0.5	5.00e+3	1	1.00	0.50	100.00	50.00	0.01	5.00e-03

Table 1. Chemical Constituent Toxicity, Mobility, Bioaccumulation Data

SOURCE	HAZARDOUS SUBSTANCE	TOXICITY	GROUND WATER PATHWAY		SURFACE WATER PATHWAY												
			OVERLAND/FLOOD MIGRATION								GROUND WATER TO SURFACE WATER						
			GW Mobility (HRS Table 3-8)	Tox/Mobility Value (HRS Table 3-9)	Per (HRS Tables 4-10 and 4-11)	Tox/Per Value (HRS Table 4-12)	Bioac Pot. (HRS Table 4-15)	Tox/pers/Bioac Value (HRS Table 4-16)	Ecotox (HRS Table 4-19)	Ecotox/Pers (HRS Table 4-20)	Ecotox/Pers/Bioac Value (HRS Table 4-21)	Tox/Mob/Pers (HRS Table 4-26)	Tox/Mob/Pers/Bioac Value (HRS Table 4-28)	Ecotox/Mob/Pers (HRS Table 4-29)	Ecotox/Mob/Pers/Bioac Value (HRS Table 4-30)		
Unknown	Nickel	100	.01	1.00	1	100.00	.5	50.00	10	10.00	5.00	1.00	0.50	0.10	0.05		
2	Cadmium	10000	1	10,000	1	10,000	5000	5.00e+07	1000	1,000	5.00e+6	10000	5.00e+07	10000	5.00e+07		
1,3	Methyl Ethyl Ketone	10	1	10.00	.4	4.0000	.5	2.00	1	0.40	0.20	4.00	2.00	0.40	0.20		
1	Isophorone	10	1	10.00	1	10.0000	.5	50.00	1	1.00	5.00	10.00	50.00	10.00	50.00		
1	Naphthalene	1	.01	0.01	.4	.4	500	200.00	1000	400.00	2.00e+04	0.004	2.00	0.004	2.00		
3	Toluene	10	.01	0.10	.4	4.0000	.50	200.00	100	40.00	2,000.00	0.04	2.00	0.40	2.00		
3	Acetone	10	1	10.00	.0007	0.0070	.5	0.00	100	0.07	0.04	0.01	0.01	0.07	0.04		
3	Tetrachloroethylene	100	.01	1.00	.4	40.0000	.50	2,000.00	100	40.00	2,000.00	0.40	20.00	0.40	20.00		
1	Ethylbenzene	10	.01	0.10	.4	4.0000	.50	200.00	100	40.00	2,000.00	0.04	2.00	0.40	20.00		
1	Xylenes	1	.01	0.01	.4	0.4000	.50	20.00	100	40.00	2,000.00	0.004	0.20	0.40	20.00		
3	Dichloroethene, cis-1,2-	100	1	100.00	.4	40.0000	.5	200.00	-	-	-	40.00	200.00	-	-		
3	Dichloroethane, 1,2-	100	1	100.00	.4	40.0000	.5	200.00	1	0.40	2.00	40.00	200.00	0.40	2.00		
3	Trichloroethane, 1,1,2-	1000	.01	10.00	.4	400.0	.50	20,000.00	10	4.00	200.00	4.00	200.00	0.04	2.00		

Table 1. Chemical Constituent Toxicity, Mobility, Bioaccumulation Data

SOUR CE	HAZARDOUS SUBSTANCE	TOXI CITY	GROUND WATER PATHWAY		OVERLAND/FLOOD MIGRATION				SURFACE WATER PATHWAY				GROUND WATER TO SURFACE WATER			
			GW Mobility (HRS Table 3-8)	Tox/ Mobility Value (HRS Table 3-9)	Tox/Per (HRS Tables 4-10 and 4-11)	Bioac Pol. (HRS Table 4-12)	Tox/Per/ Bioac Value (HRS Table 4-15)	EcoTox/ Pers (HRS Table 4-19)	EcoTox/ Pers (HRS Table 4-20)	Tox/Mol/ ab/ Bioac Value (HRS Table 4-21)	Tox/Mol/ Pers/ Bioac Value (HRS Table 4-26)	Tox/Mol/ Pers/ Bioac Value (HRS Table 4-28)	EcoTox/ / Bioac Value (HRS Table 4-29)			
3	Dichloroethene, trans 1,2-	100	.1	100.00	.4	40.00	50	2.00e+03	1	0.40	20.00	40.00	2.00e-03	40.00	2.00e-03	
2?4?	Zinc	10	.01	0.10	1.0	10.00	500	5.00e+03	10	10.00	5.00e+03	0.10	50.00	0.10	50.00	
2	Selenium	100	.01	1.00	1.0	100.00	5.00e+03	5.00e+05	100	100.00	5.00e+05	1.00	5.00e-03	1.00	5.00e+3	
2?4?	Copper			.01	-	1.0	-	50.000	-	100	100.00	5.00e+06	-	-	1.00	5.00e+05
3	Methylene Chloride	10	.1	10.00	.4	4.00	\$	20.00	1	0.40	2.00	4.00	20.00	0.40	2.00	

Table 1. Chemical Constituent Toxicity, Mobility, Bioaccumulation Data

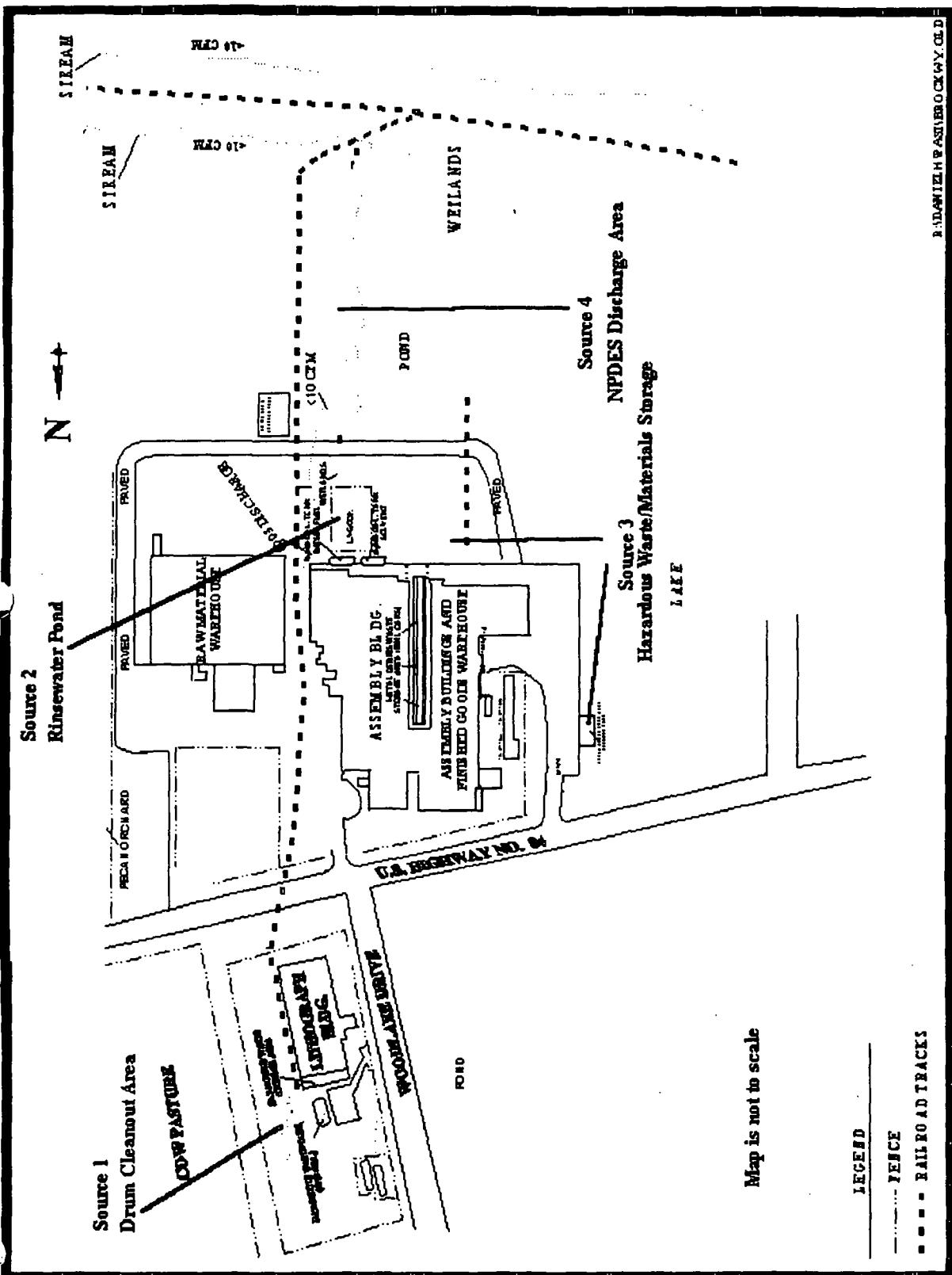


Figure 4. Identified Source Areas at Brockway Standard

### **2.3.2 Rinsewater/Sludge Pond**

This pond (Photos #5 and #6, Appendix IV) was previously constructed for holding metal finishing wastewater and associated sludges. The pond is not known to be lined and measures approximately 125 feet by 125 feet. The depth of the pond is not known; however, it is not expected to be more than 10 feet deep. Surface area only will be used for establishing the waste quantity. Previous sampling of the pond sludge has indicated that arsenic, chromium, cadmium, and lead have been detected.

### **2.3.3 Hazardous Waste Storage/Hazardous Material Storage Areas**

The Hazardous Waste Storage Area (Photos #9 and #10) located west of the Assembly Building has been the site of numerous releases of waste paints, waste solvents, used oils, and solvent products. At the time of the site reconnaissance, approximately sixty-seven (67) 55-gallon containers of hazardous wastes were stored in the Storage Area. An area located just south of the Assembly Building was used in the past of the storage of containers of 1,1,1-trichloroethane. Sampling from these areas during other investigations have indicated releases of solvent, hydrocarbon, and metal constituents.

### **2.3.4 NPDES Discharge Area**

Prior to being issued a NPDES wastewater discharge permit, the facility at the site discharged wastewaters from metal finishing operations to the drainage ditch and to the rinsewater/sludge lagoon. These historical releases appear to have impacted the soils within the drainage ditch [approximately 1,000 feet long and five (5) feet wide] and impacted the wetlands to which the ditch drains. The ditch appears to be about four (4) feet deep. Metals are a primary concern. Previous records at the facility indicate that lead used to be discharged from the facility's operations (References 1,2,6).

## **3.0 WASTE/SOURCE SAMPLING**

### **3.1 Sample Locations**

Four (4) areas were identified as sources for this SI. Various investigations have provided data for evaluating these four (4) sources. These investigations (References 8,9,11) included the following documents:

Report on Phase II Environmental Investigation at the Brockway Standard Facility, Homerville, Georgia, July 1994 by Golder Associates, Inc.

Report of a Limited Sampling and Testing Program (Law Project #40544-6-7739), June 19, 1996 by Law Engineering and Environmental Services, Inc.

Chemical Report #904792, December 7, 1987 by Law Company.

Table 2 presents a summary of sampling activities locations and analytical results for the identified source areas (Appendix II).

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one billion mark. This is a momentous event in the history of the  
world. It is a momentous event in the history of man. It is a momentous  
event in the history of civilization. It is a momentous event in the  
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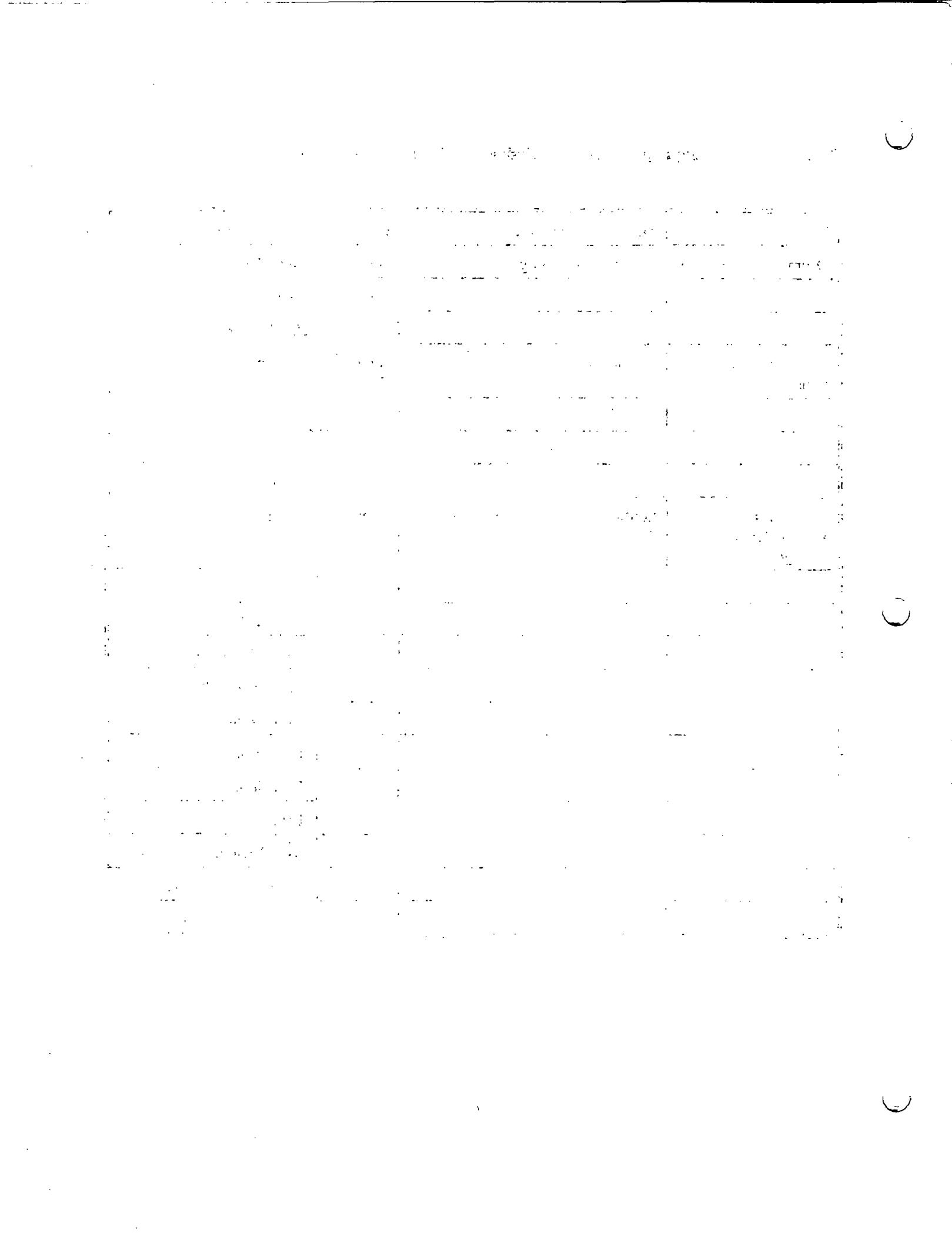
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history of the world.

**Table 2. Source Sampling Locations, Including Media and Constituents**

Source	Sampling Locations	Media	Constituents
Drum Cleanout Area	East of Litho. Bldg	Soil	Methyl ethyl ketone
			Xylene
			Ethyl benzene
Rinsewater/Sludge Pond	Unknown	Sludge/ Soil	Cadmium
			Chromium
			Barium
			Lead
Hazardous Waste/Materials Storage Areas	South and West of Assembly Bldg.	Ground water	Vinyl Chloride
			Chloroethane
			1,1-Dichloroethene
			1,1-Dichloroethane
			1,2-Dichloroethane
			1,1,1-Trichloroethane
			Trichloroethene
			Tetrachloroethylene
			Toluene
			cis-1,2-Dichloroethylene
			Methylene Chloride
			trans-1,2-Dichloroethylene



**Table 2 (continued). Source Sampling Locations, Including Media and Constituents**

Source	Sampling Locations	Media	Constituents Maximum Detected Levels
NPDES Discharge Area	South of Assembly Bldg.	Sediment	Lead
			Arsenic
			Barium
			Cadmium
			Chromium
			Nickel

Specific locations of sample collections are detailed in Appendix II. Previously obtained and reported samples for soils and the rinsewater/sludge pond sludge (References 8,9,11) were used for evaluating these source areas.

### **3.2 Analytical Results**

Analytical results for the source areas are presented in Table 3. The analyses indicate that releases from these sources have occurred to the sediment, groundwater, and surface water, as well as to the soil.

**Table 3. Source Sampling Analytical Results**

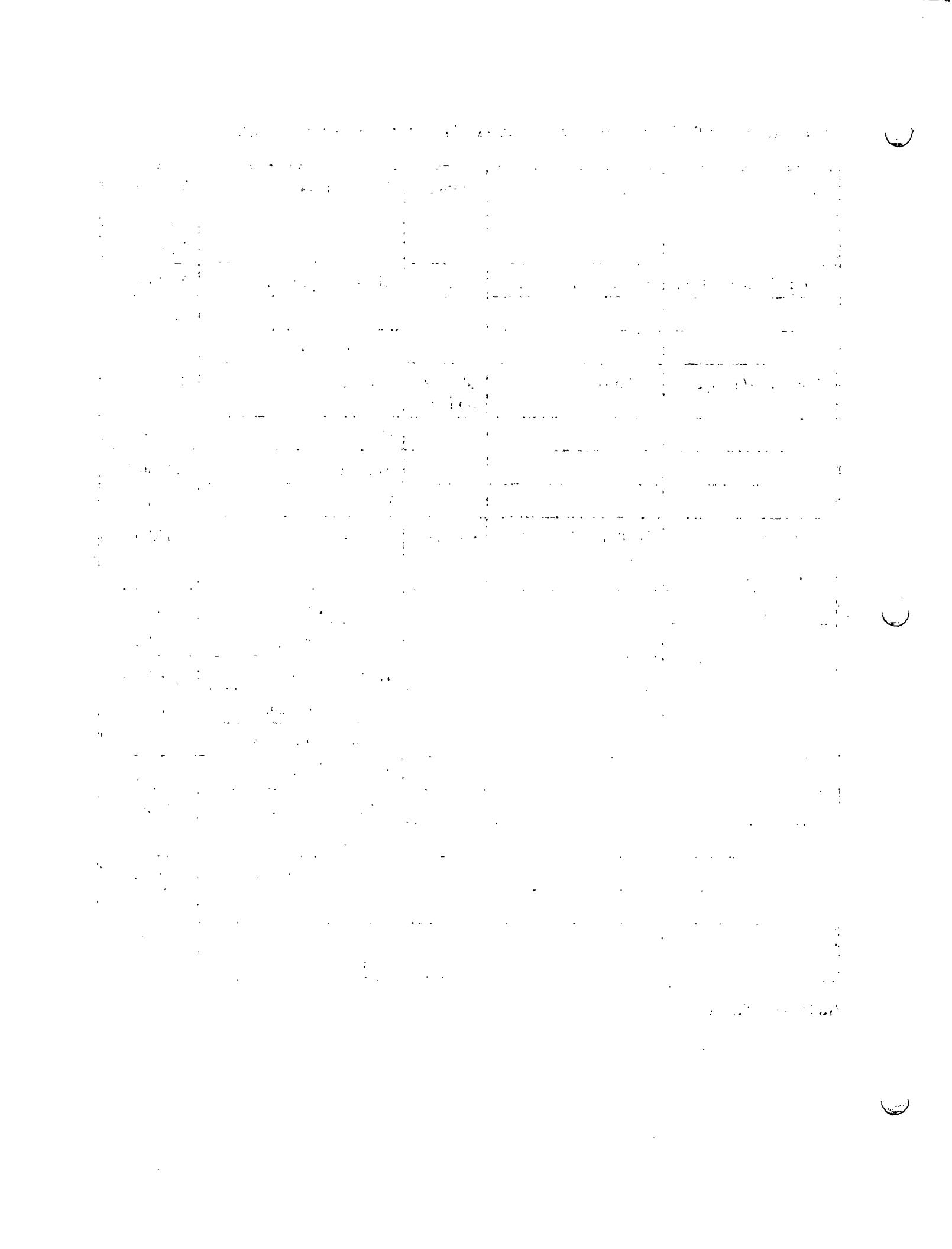
Source	Sampling Locations	Media	Constituents	Maximum Detected Levels
NPDES Discharge Area	South of Assembly Bldg.	Sediment	Lead	703 mg/kg
			Arsenic	3.85 mg/kg
			Barium	56 mg/kg
			Cadmium	5.72 mg/kg
			Chromium	92.1 mg/kg
			Nickel	71.8 mg/kg

16.

**Table 2 (continued). Source Sampling Locations, Including Media and Constituents**

Source	Sampling Locations	Media	Constituents	Maximum Detected Levels
Drum Cleanout Area	East of Litho. Bldg	Soil	Methyl ethyl ketone	2.67 ppm
			Xylene	27.4 ppm
			Ethyl benzene	51.4 ppm
Rinsewater/Sludge Pond	Unknown	Sludge/ Soil	Cadmium	3.9 ppm
			Chromium	190 ppm
			Barium	150 ppm
			Lead	230 ppm
Hazardous Waste/Materials Storage Areas	South and West of Assembly Bldg.	Ground water	Vinyl Chloride	8,820 ug/l
			Chloroethane	63 ug/l
			1,1-Dichloroethene	9,840 ug/l
			1,1-Dichloroethane	5,440 ug/l
			1,2-Dichloroethane	408 ug/l
			1,1,1-Trichloroethane	2,670 ug/l
			Trichloroethene	2,940 ug/l
			Tetrachloroethylene	149 ug/l
			Toluene	107 ug/l
			cis-1,2-Dichloroethylene	4,350 ug/l
			Methylene Chloride	81 ug/l
			trans-1,2-Dichloroethylene	59 ug/l

(References 8,9,11)



### **3.3 Conclusion**

Source area samples indicate that contaminants may have been introduced to the soil, surface water, and groundwater. The above mentioned source areas should be evaluated to determine the degree of release, if any, that has occurred from these source areas.

## **4.0 GROUND WATER PATHWAY**

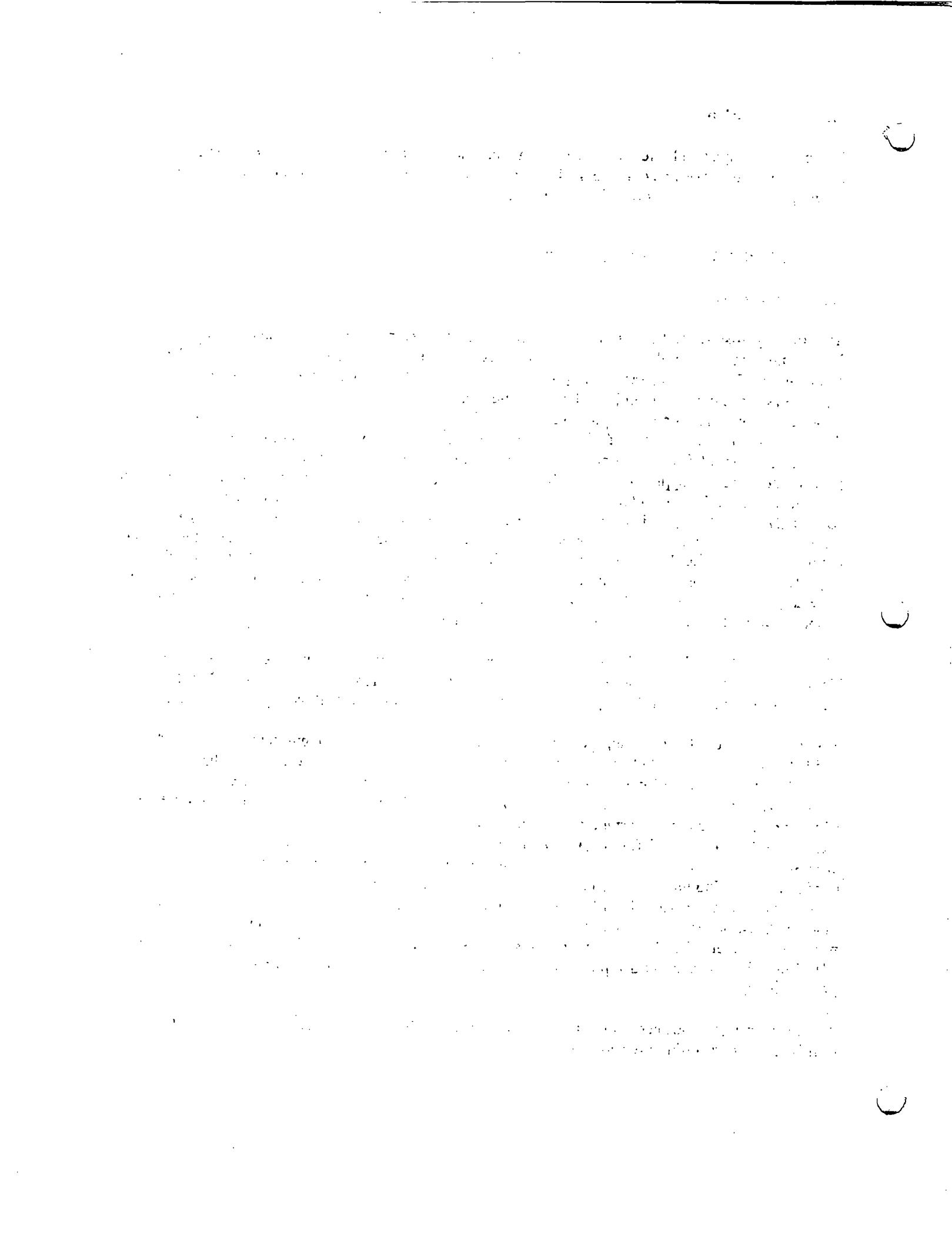
### **4.1 Hydrogeology**

The local hydrostratigraphy consists predominantly of interlayered, unconfined sand and clay water bearing units of variable thicknesses which overlay the limestones of the Floridan Aquifer. The Floridan Aquifer is used as the primary water supply source for high demand users, while the shallow aquifer system is commonly utilized for domestic water usage (Reference 12). Previous investigations indicate that there is no overall confining barrier to local vertical migration of chemicals, at least 40 feet below ground surface, the depth of the drilling conducted on site. Well completion records for the three (3) City of Homerville drinking water supply wells indicate an upper 25 to 75-foot interval of sand, underlain by approximately 50-80 feet of soft blue clay. An additional 30 to 70 feet of sand or sandstone underlays this blue clay. A 60- to 80-foot interval of tight blue marl extends from the base of the sands to approximately 334 feet below surface, which marks the beginning of the limestone. Some sandstone may exist above the limestone (Miocene to Upper Eocene), which exists around 300 to 330 feet below surface. The Floridan Aquifer represents the Deep Aquifer (Reference 13). Three (3) aquifers have been identified: the shallow aquifer at 30 feet, which is not known to provide public water supply; the intermediate aquifer at 50 feet, which does supply public water supply, and the 600-foot aquifer, which also supplies public water supply.

The upper sands of Pliocene-Recent formations provide sufficient groundwater for residential usage. These wells represent groundwater within the shallow aquifer. Monitoring wells located at the facility are primarily completed in the upper sections of the sand units in the shallow aquifer (Reference 8).

The city of Homerville water supply system consists of well #1 (bored, depth unknown), well #2 (drilled to 600', cased to 338', unscreened, yield of 608 gpm, located 200 feet east of the site), and well #3 (bored to depth of 600', cased to 360', unscreened, yield of 800 gpm, located 1000 feet west of site). Annual sampling data from these wells does not indicate contamination has been observed (Reference 14). The city is permitted to withdraw up to 500,000 gpm average monthly withdrawal (Reference 13). Over 95% (.32 mgal/day) of groundwater withdrawn in Clinch County for the purpose of public supply comes from the Homerville Water System, which services 3,500 people (Reference 15). Individual residential wells represent a small percentage of ground water users in the area. Wells are approximately 50' in depth. Mr. Hosea Jones owned a shallow well approximately .5 mile southeast of the site. Completion records were not available. Mr. Blanchette owned a shallow well approximately .5 mile northwest of the site (due west of the portion of the site north of Highway 84). The well is located near a pond. Ms. Blanchette reported the well to be about 50 feet deep (Reference 2).

A production well is located on the property of Brockway Standard. Primary use of the production well is for manufacturing processes only.



#### **4.2 Targets**

Table 4 presents the number of people on public and private water sources within 1/4, 1/2, 1, 2, 3, and 4 miles of the site (Reference 16). The majority of the population within a four-mile radius obtains drinking water from a municipal well (Municipal Well #3) operated by the City of Homerville. Municipal Well #3 is located approximately 1000 feet west of the site and serves approximately 3500 residents living in Homerville and additional surrounding communities outside the city limits. The city's reserve water supply well (Municipal Well #2) is located approximately 200 feet east of the site.

The population served by private drinking water wells within 4, 3, 2, 1, and 1/2 mile(s) from the site is 81, 61, 32, 6, and 2, respectively. The nearest residence (Ms. Blanchette) relying on a private drinking water well resides within 1500 feet northwest (upgradient) of the site. The Blanchette well is located near a pond and was reported to be 50' deep (Reference 2). Mr. Hosea Jones's well (.5 mile southeast) is the closest private residential well downgradient of the site. The Jones and Blanchette wells are located on the site topographic map in Appendix I.

**TABLE 4: Private Wells Within a 4-Mile Radius of the Brockway Standard Site.**

Radius (miles)	# Drilled Wells	# Dug Wells	# Other Water Sources	Population on Private Wells
0 - .25	0 *	.01	0	0*
.25 -.50	0	0	0	0
.50 - 1	2	0	0	6.41
1 - 2	11.69	1.09	.06	31.66
2 - 3	21.47	2.93	.10	60.99
3 - 4	28.51	4.36	.13	81.44
<b>TOTAL</b>	<b>64.74</b>	<b>8.54</b>	<b>.31</b>	<b>182.07</b>

\* Homerville Water System Well #3 is located within the 0-.25 mile radius and supplies 3,500 people.

Because the production well on the site is not used for public supply, that well is not considered a target. In addition, no drinking water or irrigation supply wells in the 30-foot aquifer were identified (References 2,8,9,14). Two (2) water supply wells were identified as targets in the 50-foot aquifer (Reference 2). The 600-foot municipal supply well for the city of Homerville was identified as a target (References 1 and 2). The 182 wells that were identified in the CENTRACTS data were understood to be completed in the 50-foot or 600-foot aquifers, since no wells could be located in the 30-foot aquifer (References 2,14,16).

#### **4.3 Sample Locations**

Although no targets were identified in the 30-foot aquifer, sample locations from previous investigations are included in Appendix II.

For the 50-foot aquifer, Hosea Jones's well was sampled for the volatile organic compounds (VOCs), semi-volatile organic compounds, and metals.

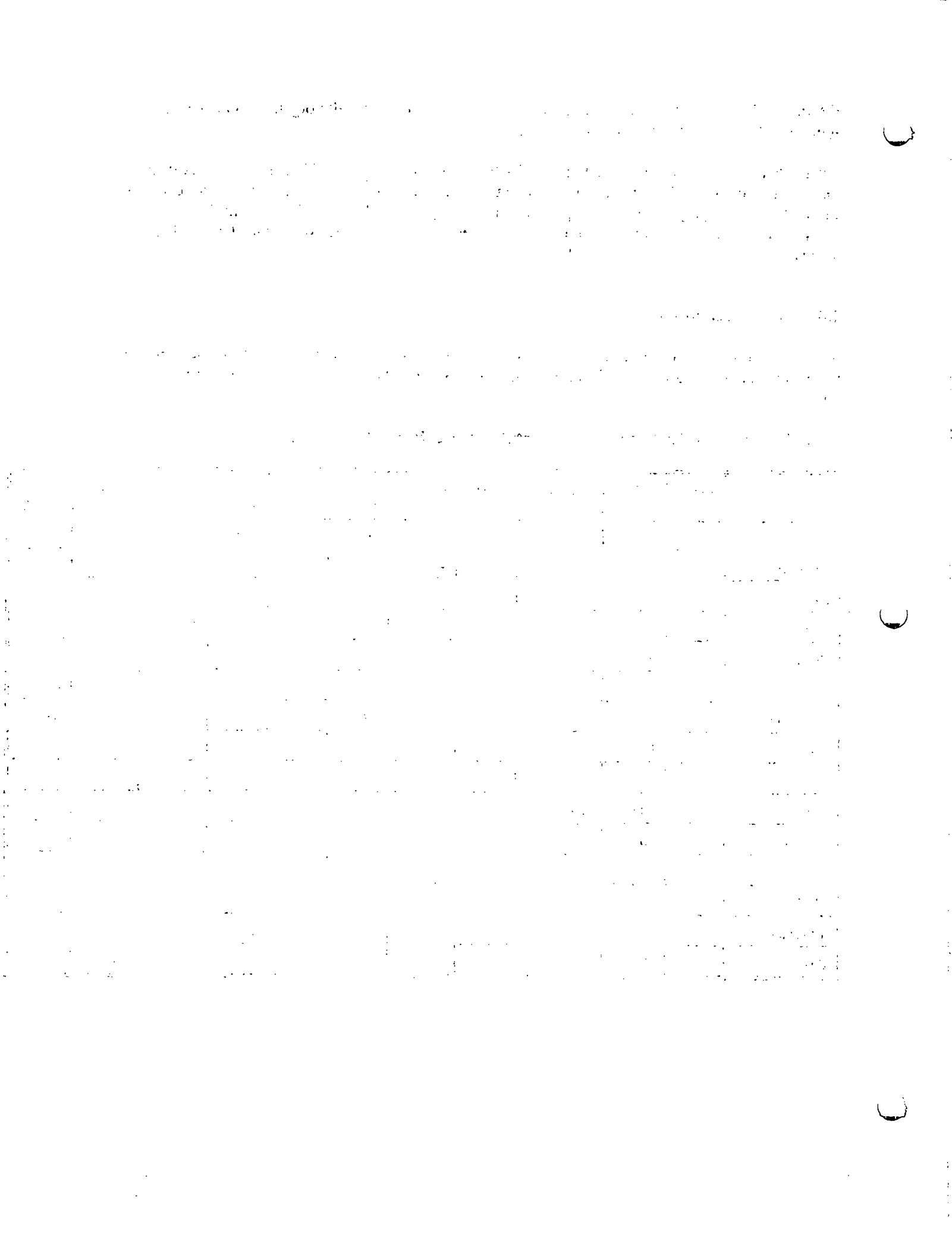
For the 600-foot aquifer, the Municipal Well #3 operated by the City of Homerville was evaluated. This well is tested by the Department of Natural Resources on a semi-annual basis. Both locations are shown on the topographic map in Appendix I and in Figure 5. The groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (semi-VOC), and metals.

#### 4.4 Analytical Results

Results from previous investigations (References 8,9) were used to evaluate the 30-foot aquifer. These results are summarized in Table 5 and indicate releases above benchmarks for the respective constituents.

**Table 5 - Groundwater Results for 30-foot Aquifer at Brockway Standard**

Analyte	Units	MCL	EPDJones 60100	GLD MW3	GLD MW3A	GLD MW7	GLD MW8	GLD MW9	GLD MW10	GLD MW11	GLD MW12
Lead	ug/l	15	1.4	-	-	90	100	1230	70	ND	100
Antimony		6	-	-	-	-	-	-	-	-	-
Arsenic		50	ND	-	-	-	-	-	-	-	-
Barium		2000	27	-	-	180	110	170	140	120	360
Beryllium		2	-	-	-	-	-	-	-	-	-
Cadmium		5	ND	-	-	-	-	-	-	-	-
Chromium		100	ND	-	-	130	70	170	90	30	160
Cobalt		N	-	-	-	-	-	-	-	-	-
Copper		N	-	-	-	-	-	-	-	-	-
Nickel		100	ND	-	-	-	-	-	-	-	-
Selenium		50	ND	-	-	-	-	-	-	-	-
Silver		N	ND	-	-	-	-	-	-	-	-
Thallium		2	-	-	-	-	-	-	-	-	-
Vanadium		N	-	-	-	90	70	70	90	ND	120
Zinc		N	-	-	-	100	160	230	100	60	130

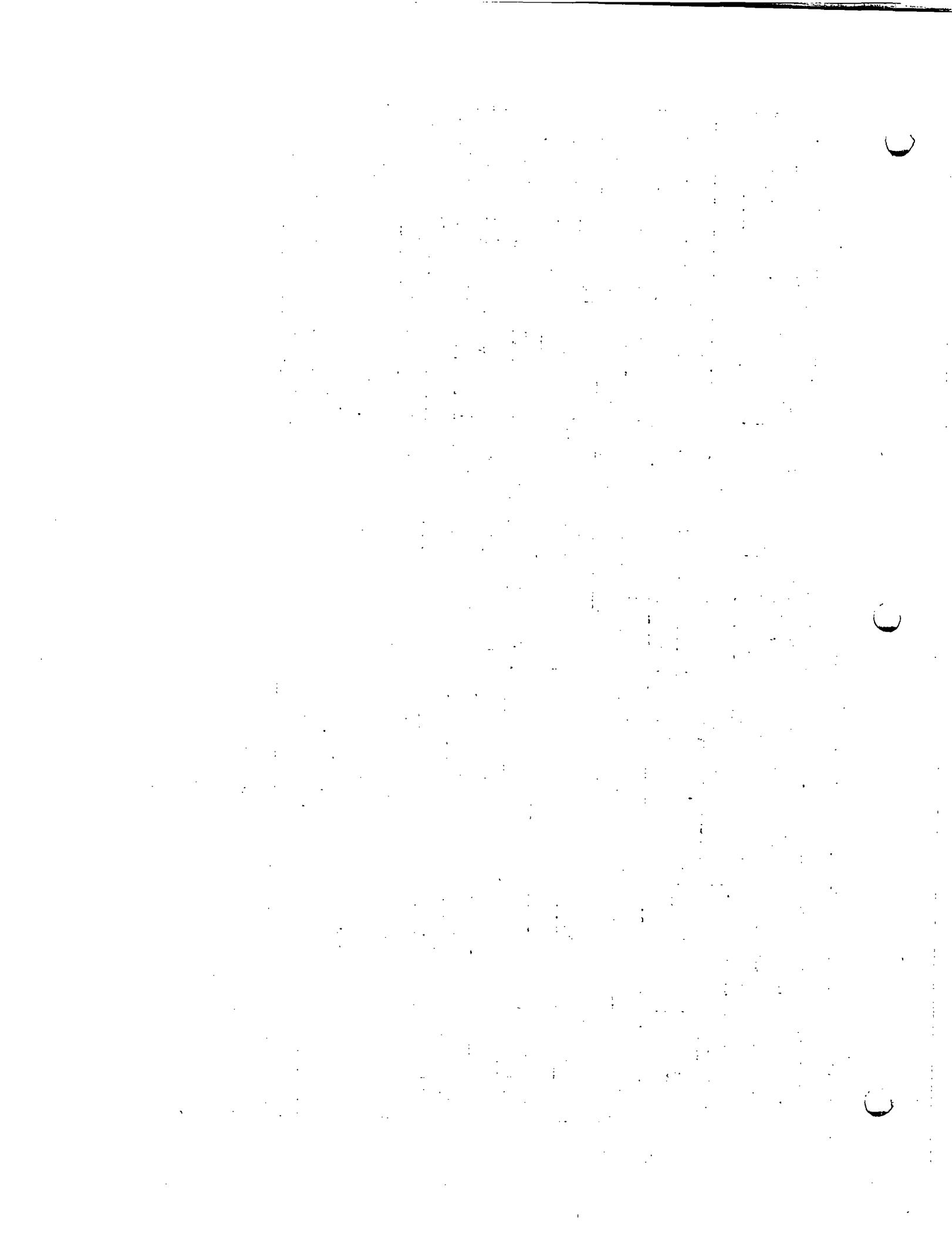


**Table 5 (continued) - Groundwater Results from 30-foot Aquifer at Brockway Standard.**

Analyte	Units	MCL	EPD Jones 60100	GLD MW3	GLD MW8	GLD MW9	GLD MW10	GLD MW11	GLD SC6-10	GLD HP9	GLD HP18	GLD HP20	GLD HP12
vinyl Chloride	ug/l	2	ND	ND	550	35	12	14	ND	8820	131	724	ND
chloroethene	N	ND	937	ND	ND	17	11	ND	ND	63	ND	ND	ND
1,1-DCE	7	ND	<b>101J</b>	<b>6210</b>	783	393	307	3250	9840	201	140	ND	ND
1,1-DCA	N	ND	761	1060	118	337	283	199	5440	61	120	ND	ND
1,2-DCA	5	ND	ND	<b>38J</b>	ND	31	31	<b>19J</b>	<b>408</b>	8	ND	ND	ND
2-butanone	N	ND	ND	496J	ND	ND	ND	ND	ND	ND	ND	1580J	ND
1,1,1-TCA	200	ND	ND	135	ND	28	72	<b>2670</b>	360	ND	ND	ND	ND
TCE	5	ND	ND	<b>253</b>	<b>153</b>	<b>97</b>	<b>12</b>	<b>639</b>	<b>69</b>	<b>21</b>	<b>2940</b>	ND	ND
1,1,2-TCA	5	ND	ND	ND	ND	ND	ND	<b>15J</b>	<b>27J</b>	<b>2J</b>	ND	ND	ND
Benzene	5	ND	<b>88J</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	<b>4J</b>
Tetrachlor.	5	ND	ND	ND	ND	ND	ND	<b>8J</b>	<b>149</b>	ND	ND	ND	ND
Toluene	1000	ND	522	196	ND	ND	107	99	ND	ND	ND	ND	37
Ethylbenzene	700	ND	167	<b>58J</b>	ND	ND	ND	ND	ND	ND	ND	ND	20
xlenes	10000	ND	7520	2360	ND	9	41	ND	36J	ND	802	99	
cis-1,2-DCE	70	ND	ND	<b>1530</b>	60	12	15	<b>118</b>	<b>4350</b>	<b>94</b>	<b>4320</b>	ND	ND
Methylene Cl	5	ND	-	-	-	-	-	-	81	ND	ND	ND	ND
Trans 1,2-DCE	100	ND	-	-	-	-	-	-	59	ND	12J	ND	ND

**Bold** - Level detected exceeds MCL (benchmark)

ND - Not detected  
- Not analyzed  
N - No MCL



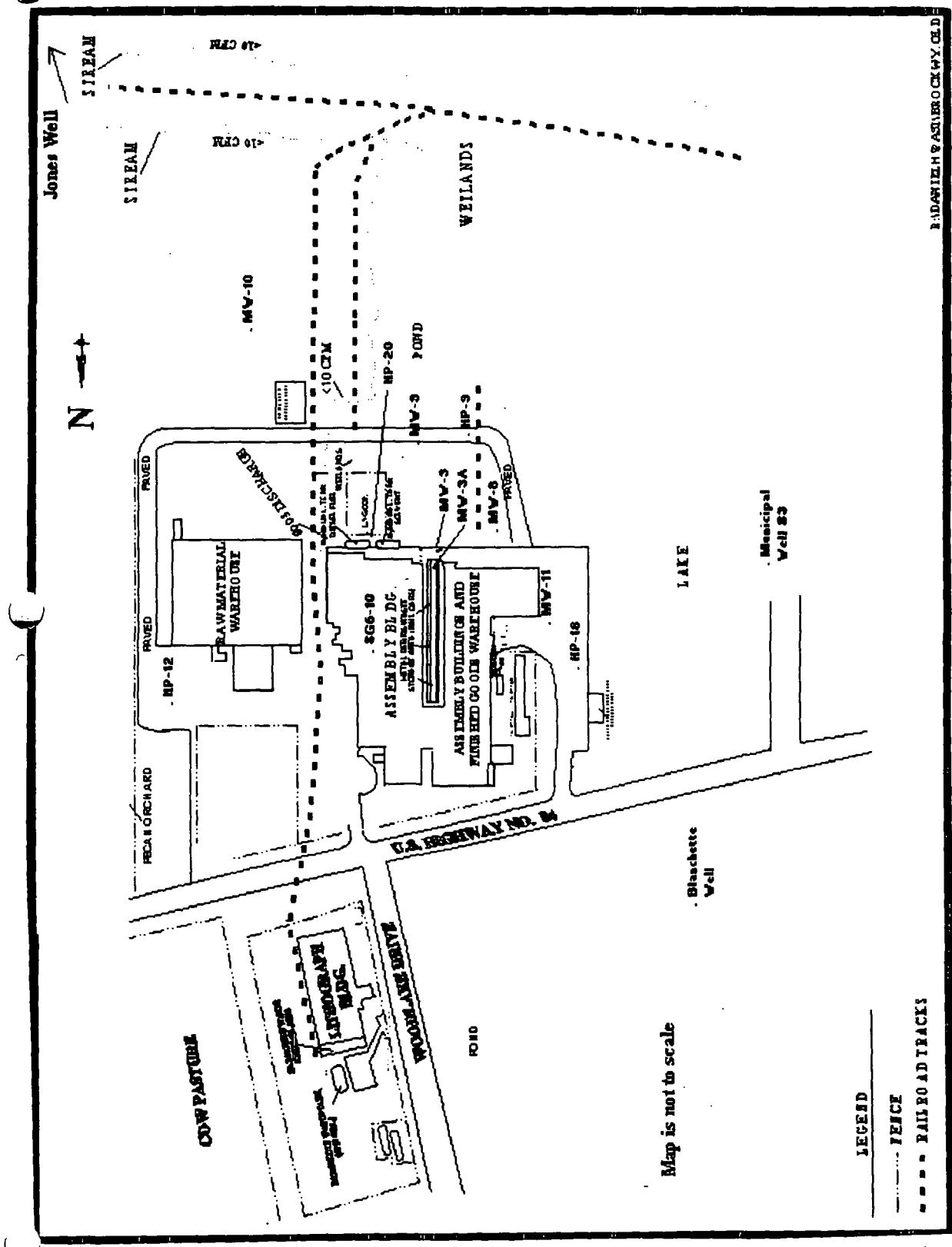


Figure 5. Ground Water Sampling Locations

Sample results from the Hosea Jones well, used to evaluate the 50-foot aquifer, did not indicate detections of constituents originating from the site. Results for Mr. Jones's well can be found in Table 4 and Appendix III and included 1.4 ug/l of lead and 27 ug/l of barium, both much below their respective MCLs for groundwater.

In evaluating the 600-foot aquifer, sampling analysis performed on April 18, 1995 and November 15, 1994 by the Environmental Protection Division for the City of Homerville Municipal Well #3, did not indicate any detections of constituents at or above their respective benchmarks (References 13 and 14) (Appendix II).

#### **4.5 Conclusions**

The results of the sampling analysis for the shallow 30-foot aquifer indicate that the shallow groundwater has been impacted by releases at the site at levels above benchmarks.

The results of the sampling analysis for the intermediate 60-foot aquifer indicate that the aquifer does not appear to have been impacted by the site, possibly due to clay confining layers situated below the shallow aquifer.

The results from the sampling analysis for the City of Homerville indicate non-detect for the hazardous substances found in the monitoring wells located at the site. These results indicate that the 600-foot aquifer does not appear to be impacted by the site, possibly because of the great depth at which this aquifer is located.

### **5.0 SURFACE WATER PATHWAY**

#### **5.1 Hydrology**

The site is low-lying and predominantly flat with no visible relief. There are no major bodies of water within 15 downstream miles (References 1,2,4). Drainage from the site flows south into an area of wetlands and southwest into a large pond. The pond empties into wetlands associated with Lees Bay. Surface waters within Lees Bay drain south into Sweetwater Creek or Jones Creek. Both creeks flow into Suwanoochee Creek. Jones Creek, the primary pathway for the site, empties into Suwanoochee Creek more than fifteen (15) miles downstream from the site (References 4 and 17). The surface water pathway is illustrated in Figure 6.

#### **5.2 Surface Water Targets**

There are no drinking water intakes located within fifteen (15) miles downstream of the site (References 4,13,17). The majority of area residents obtain drinking water from a municipal well operated by the City of Homerville (Reference 14). Residents not served by the municipal well system obtain drinking water from individual private wells.

Recreational fishing is known to occur in the surrounding waters. Because there are no major bodies of water in the local area, fishing is limited to small creeks and water ditches located in accessible areas (i.e. roadside ditches and lagoons). The aquatic species commonly caught for consumption

include chain pickerel, redfin pickerel, and various sunfish and panfish such as warmmouth, flier, and bluegill (Reference 1).

Extensive wetlands are located adjacent to the site and extend greater than fifteen (15) miles downgradient from the site (References 1,17). During periods of low rainfall regional wetlands remain isolated from one another. However, during periods of high rainfall, regional wetlands are largely interconnected. This condition allows the possibility of surface water migration to extend several miles south into small, yet defined bodies of water such as Jones Creek and Lees Bay (Reference 1).

The range of several Federally designated threatened and endangered species is known to include Clinch County. Clinch County provides habitat for the endangered *Picoides borealis* (Red-Cockaded Woodpecker), the threatened **alligator mississippiensis** (American Alligator), and the Threatened *Drymarchon corais couperi* (Eastern Indigo Snake) (Reference 18). Although observation records maintained by the Georgia Natural Heritage Program (Reference 19) do not indicate an observed presence of any threatened or endangered species near the site, one American Alligator was observed living in the lake. Company officials confirmed the existence of the American Alligator and estimate its size between 8-10 feet (Reference 2).

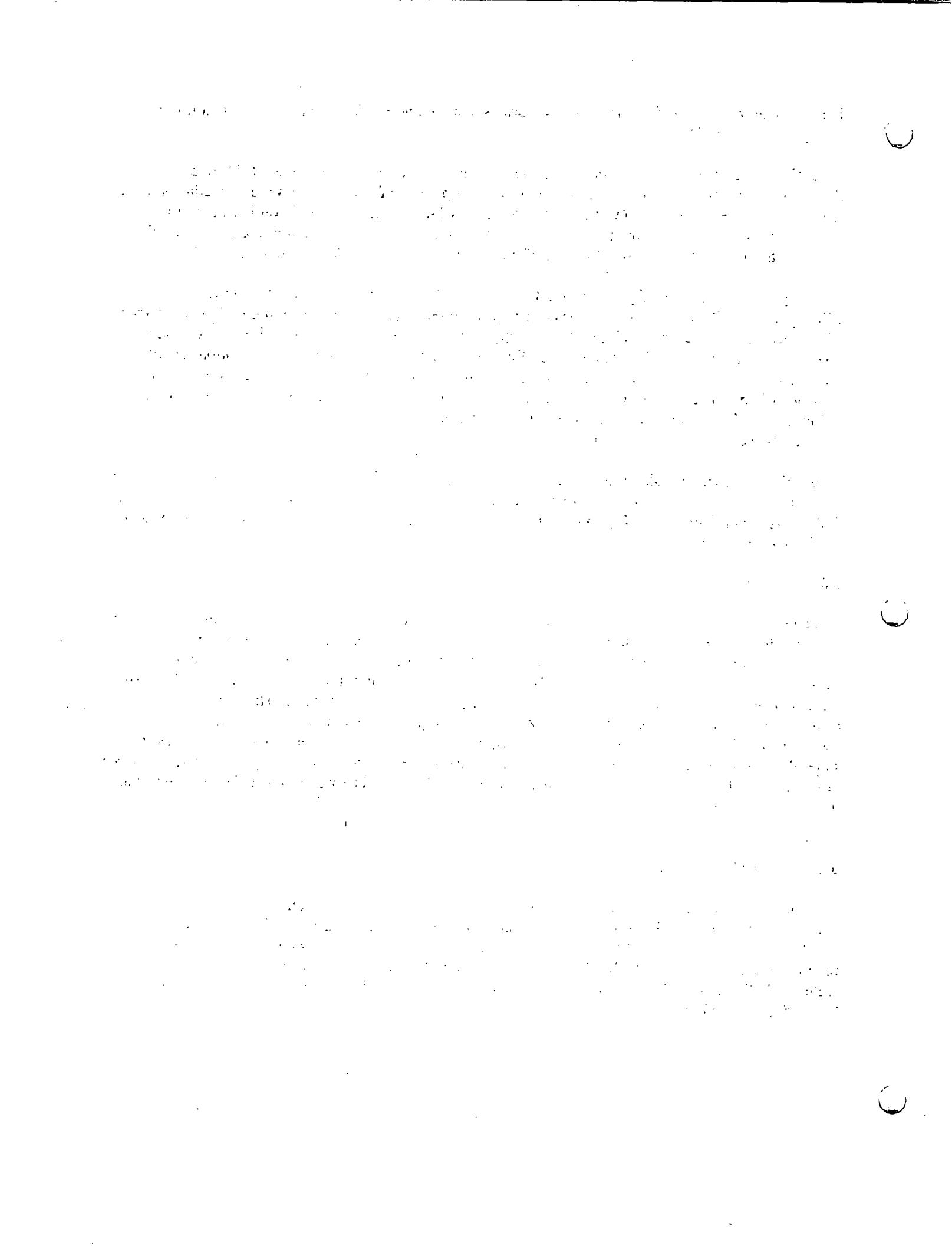
Although Clinch County also provides habitat for two (2) perennial herbs which have been designated as threatened species: *Sarracenia minor* (Hooded Pitcher Plant) and *Sarracenia flava* (Fly-Catchers or Golden Trumpet)(Reference 20), no observed presence of these plants have been documented near or on the site (Reference 19).

### **5.3 Sample Locations**

Samples were collected in all surface water targets as identified in the PA. The sampling strategy was designed to determine if contamination was released to the wetlands. A surface water (SW-1)(HW60101) and a sediment sample (Sed-1)(HW60102) were taken in the wetlands. A surface water (SW-2)(HW60103) and a sediment (Sed-2)(HW60104) were taken at a location upgradient of the site for establishing background concentrations in the surface water and sediment. The samples were analyzed for volatile organic compounds, semi-volatile organic compounds, and metals. Three (3) sediment samples, S-1, S-2, and S-3, obtained by Law Engineering and Environmental Services in June of 1996, were also used for evaluating the surface water pathway. The samples were taken in the discharge area from the Assembly Building. Locations of the surface water and sediment samples are detailed in Figure 7.

### **5.4 Analytical Results**

The surface water sample (#HW10101) (Appendix III) taken from the wetlands area reported detections above the MDL for barium at 27 ug/l, for chromium at 27 ug/l, and for lead at 140 ug/l. The background sample (#HW60103) (Appendix III) taken in a creek up gradient of the wetlands reported a detection above the MDL for barium at 10 ug/l. The sampling analysis performed at the wetlands indicates that the lead detected at 140 ug/l in the wetlands is above the benchmark of 3.2E+00 ug/l listed in SCDM.



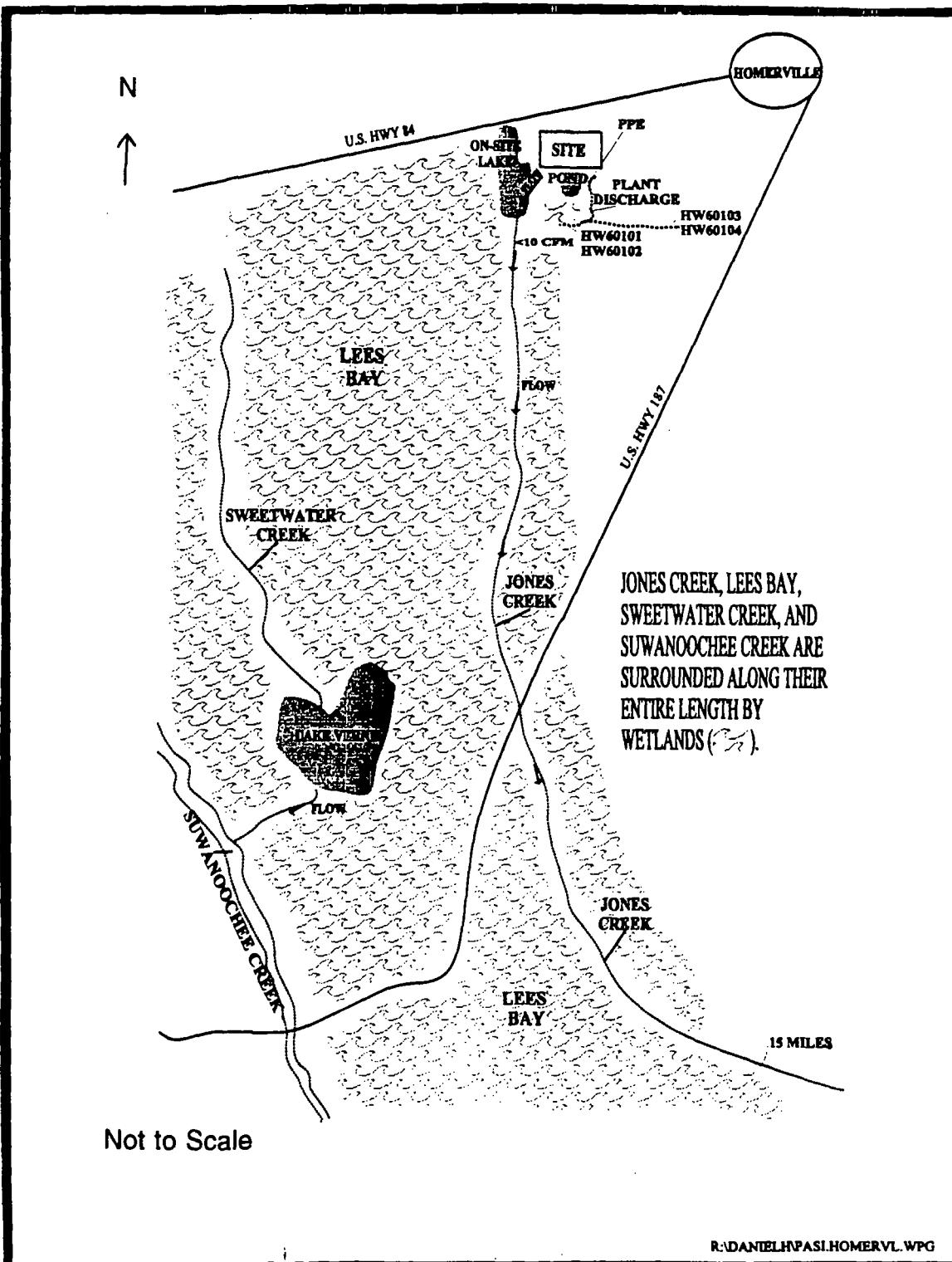


Figure 6. Surface Water Migration Route

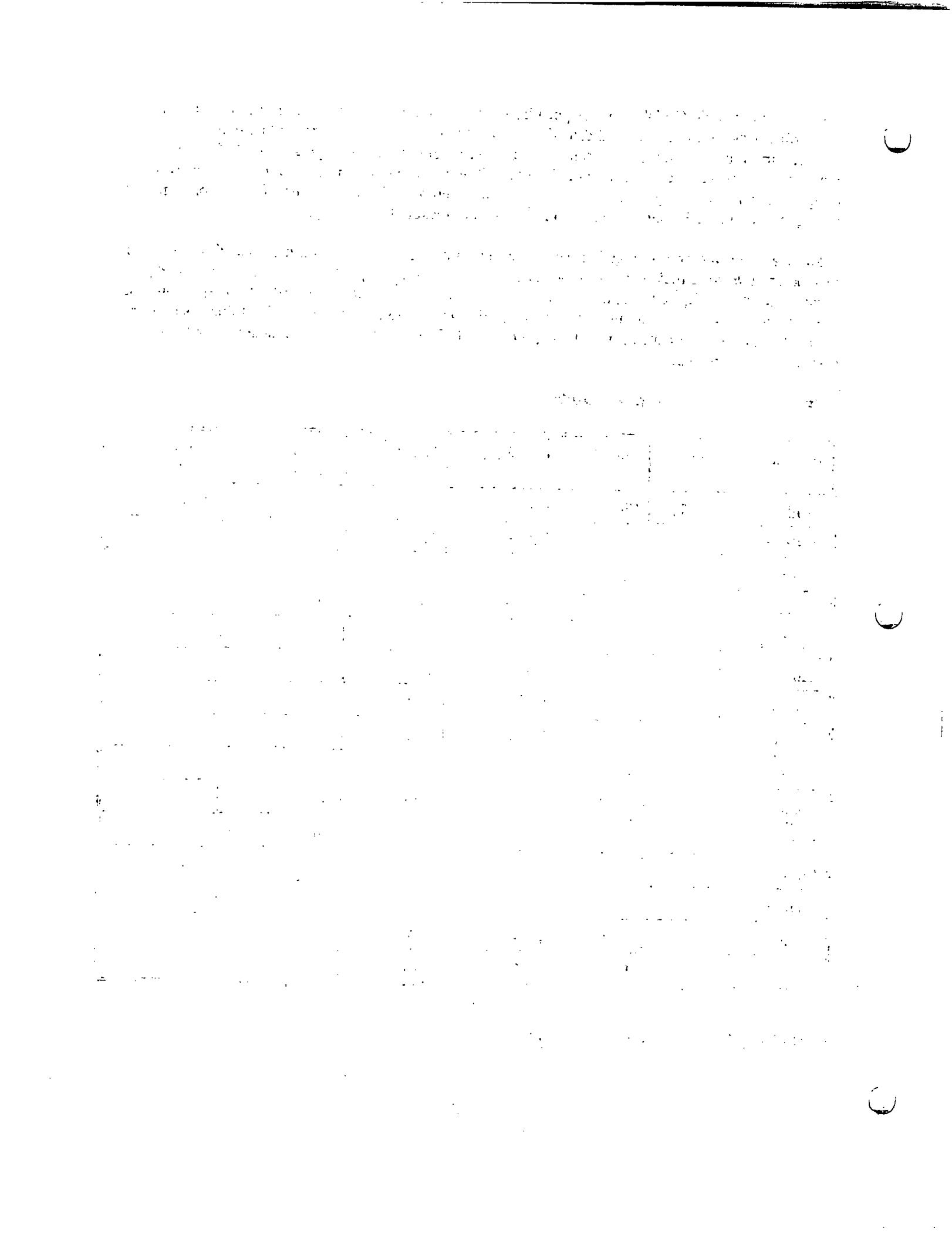
The sediment sample (#HW60102) (Appendix III) taken in the wetlands area, at the same location as the surface water sample, reported detections above the MDL for 1,2,4-trimethylbenzene at 22.7 mg/kg, barium at 260 mg/kg, cadmium at 22 mg/kg, chromium at 730 mg/kg, lead at 3200 mg/kg, nickel at 140 mg/kg, and selenium at 5.6 mg/kg. The background sediment sample (#HW60104) (Appendix III) taken up gradient of the wetlands reported detections above the MDL for barium at 9.0 mg/kg, chromium at 12 mg/kg, lead at 5.2 mg/kg, and nickel at 3.5 mg/kg.

Additionally, during an investigation performed by Law Engineering and Environmental Services, Inc in June of 1996 for Brockway, the sediment sampling collection reported detections of 703 mg/kg, 653 mg/kg, and 208 mg/kg for samples S-1, S-2, and S-3 respectively (Reference 9). This report and the sampling analysis performed during this investigation is available in Appendix II. Table 6 summarizes the analytical results for the sediment sampling. Table 7 summarizes the analytical results for the surface water sampling.

**Table 6 - Sediment Analytical Results**

Analyte	Units	Law S-1	Law S-2	Law S-3	EPDBK 60104	EPD1 60102
Lead	mg/kg	<b>703</b>	<b>653</b>	<b>208</b>	5.2	<b>3200</b>
Antimony		3.64	2.81	ND	-	-
Arsenic		<b>3.85</b>	2.56	ND	ND	ND
Barium		<b>51.5</b>	<b>56.0</b>	19.5	9.0	<b>260</b>
Beryllium		ND	0.60	0.54	-	-
Cadmium		<b>5.72</b>	<b>3.5</b>	1.71	ND	<b>22</b>
Chromium		<b>112</b>	<b>92.1</b>	32.6	12	<b>730</b>
Cobalt		ND	3.16	0.90	-	-
Copper		41.7	130	363	-	-
Nickel		<b>51.1</b>	<b>71.8</b>	10.5	3.5	<b>140</b>
Selenium		ND	ND	ND	ND	5.6
Silver		ND	ND	ND	ND	ND
Thallium		ND	ND	ND	-	-
Vanadium		2.18	3.41	8.45	-	-
Zinc		1330	1600	240	-	-

**Bold - Target levels are above detection limit or 3X background levels.**



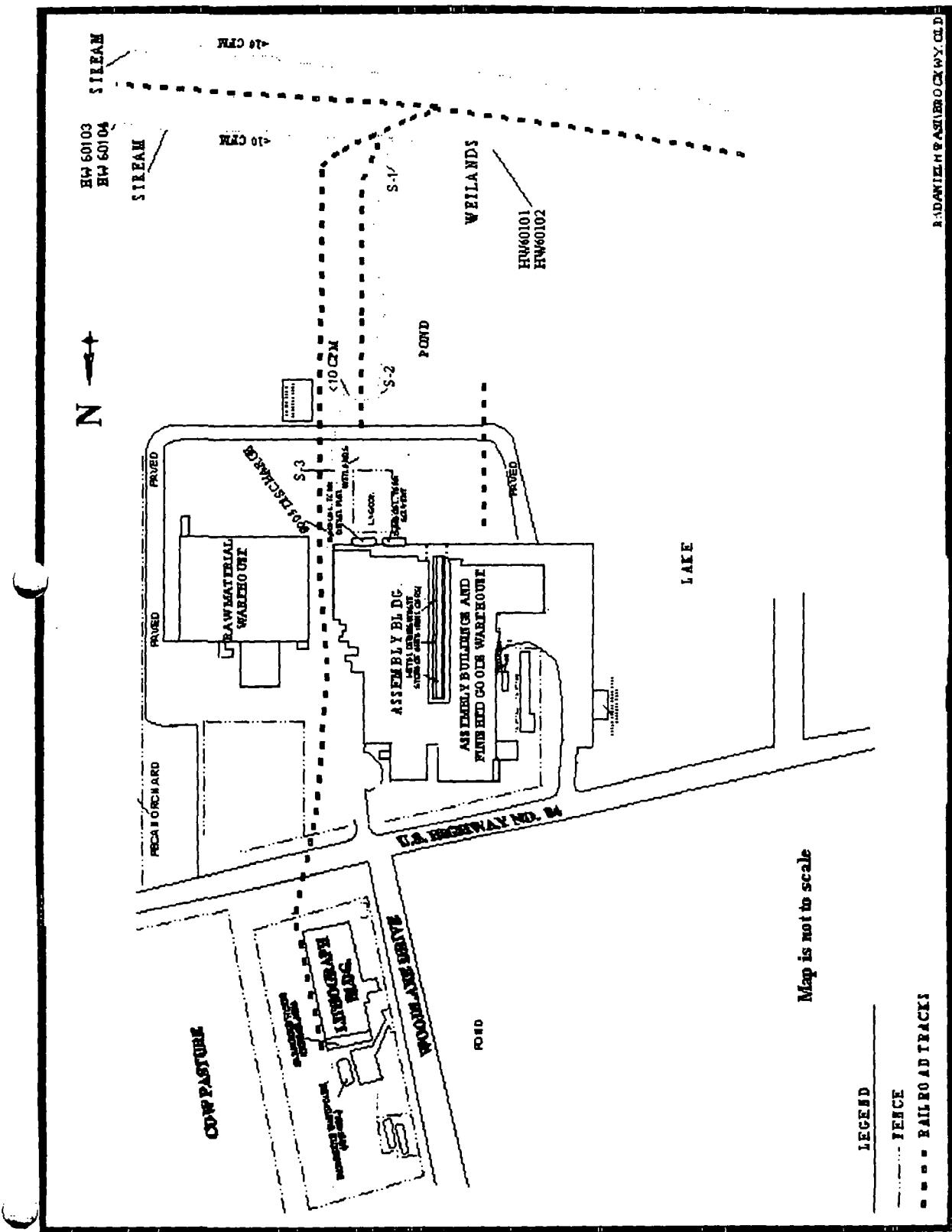


Figure 7. Surface Water/Sediment Sample Locations

**Table 7 - Surface Water Analytical Results**

Analyte	Units	AWQC	EPDBK 60103	EPD160101
<b>Lead</b>	<b>ug/l</b>	<b>1.3</b>	<b>ND</b>	<b>140</b>
Arsenic		50	ND	ND
Barium		N	15	27
Cadmium		.7	ND	ND
Chromium		11	ND	<b>27</b>
Nickel		88	ND	ND
Selenium		5	ND	ND
Silver		N	ND	ND

**Bold** - Target levels are 3X background levels or above AWQC.

N - No AWQC

## **5.5 Conclusions**

It is evident that contaminants from the site have migrated to the wetlands due to the fact that the surface water sample and sediment samples taken along the drainage pathway (ditch) and the wetlands area are substantially elevated when compared to background surface water and sediment concentrations (Reference 9).

## **6.0 SOIL EXPOSURE AND AIR PATHWAY**

### **6.1 Physical Conditions**

The site is currently active. Public access to the site is largely restricted. Natural barriers such as dense vegetation and wetlands restrict entry to the more remote areas of the property which are not fenced. Only access across unfenced areas along railroad tracks at the site's southern boundary is available (Reference 2). Security guards are present after business hours, on holidays, and during weekends at the locked fence gates (References 1 and 2).

### **6.2 Soil and Air Targets**

Brockway employees number approximately 480 on-site workers (References 1 and 2). A house count conducted during the site reconnaissance, coupled with the analysis of 1990 census data indicates approximately 1,903 people reside within a four-mile radius of the site. The nearest residence is approximately 1500 feet northeast of the site. A summary of the population distribution within a four-mile radius of the site is presented in Table 8 (References 1 and 9).

**Table 8 • Population Figures for 4-Mile Radius of Brockway Standard**

Radius	0-.25	.25-.50	.50-1	1-2	2-3	3-4
Population	36.51	94.66	300.77	516.75	383.87	570.05

The Homerville Middle and Elementary School is located 0.8 miles north of the site on Woodlake Road (Reference 1). September 1996 enrollment statistics indicate 959 students attend Homerville Middle and Elementary School (Reference 21). The school's enrollment is comprised of students in kindergarten through seventh grades.

The range of several Federally designated threatened and endangered species is known to include Clinch County. Clinch County provides habitat for the endangered *Picoides borealis* (Red-Cockaded Woodpecker), the threatened *Alligator mississippiensis* (American Alligator), and the Threatened *Drymarchon corais couperi* (Eastern Indigo Snake) (Reference 18). Although observation records maintained by the Georgia Natural Heritage Program (Reference 19) do not indicate an observed presence of any threatened or endangered species near the site, one American Alligator was observed living in the lake. Company officials confirmed the existence of the American Alligator and estimate its size between 8-10 feet (Reference 2).

### **6.3 Soil Sample Locations**

Since previous soil sampling analysis has verified that hazardous compounds are present in the soil, no further soil sampling was required during the SI to determine if there is a release of hazardous compounds to the soil. The "background data" provided in the Phase II Environmental Investigation by Golder Associates Inc. (Reference 8) in July of 1994 provides enough evidence to justify soil contamination from the facility operations. The soil sampling location used for this SI are presented in Figure 1 and are listed below.

Railroad - Sample #3212A-RR02-SB01 at 0.0 - 0.5 feet.

Railroad - Sample #3212A-RR06-SS01 at 0.0 - 0.5 feet

Also two (2) background samples were taken during the Phase II Environmental Investigation. These samples are:

Near Pecan Orchard - Sample #Bgrd 1 at the surface

North of Lake - Sample #Bgrd 2 at the surface

The soil samples taken at the railroad were analyzed for petroleum hydrocarbons, volatile organic compounds, metals, and TCLP parameters. The two background samples were analyzed for target compound list (TCL) metals.

### **6.4 Soil Analytical Results**

The reports and soil analysis for the Phase II Environmental Investigation are provided in Appendix II.

the first time in the history of the world, the  
whole of the human race has been gathered  
together in one place, and that is the  
present meeting of the World's Fair.  
The great number of people here  
from all parts of the world,  
and the great variety of things  
which are to be seen,  
make it a very interesting and  
exciting place to visit.  
There are many different  
kinds of exhibits,  
such as  
-

The results of previous environmental investigations revealed the presence of volatile organic compounds (VOCs) in the on-site soils. Elevated levels of metals were also detected in the shallow soils and sediments. The substances regulated by the state of Georgia which have been detected in the on-site soils include but are not limited to the following: chloroethane (2.72 mg/kg), 1,1-Dichloroethane (18.1 mg/kg), methyl ethyl ketone (64.1 mg/kg); 1,1,1-Trichloroethane (21.1 mg/kg), toluene (38.9 mg/kg), and lead 3,300 mg/kg) (Reference 8).

### **6.5 Air Analytical Results**

Although Brockway Standard is permitted to discharge approximately 200 tons of volatile organic compounds (VOCs) to the air per year, there was no indication of a release to the air either by direct observation or by chemical analysis by means of the sources described in this site investigation (References 2 and 22).

### **6.6 Conclusions**

The soil at the site has been impacted by releases from the site. Analytical evidence obtained during previous site assessments indicate elevated levels of VOCs and metals are present in the on-site soils (Reference 8). The large number of facility employees and the threatened species which inhabit the area serve as primary targets.

There is no indication of a release to the air pathway. An unpermitted release to the air is possible though not suspected. During the site reconnaissance, no odors were detected and there was no indication nor observation of contaminated soils being dispersed as the result of windy conditions (Reference 2). The document review does not suggest an unpermitted release to the air has occurred at this site. The air emissions originating from Brockway's manufacturing operations are monitored and permitted by the Georgia Environmental Protection Division, Air Protection Branch (Reference 12).

## **7.0 SUMMARY AND CONCLUSIONS**

The pathways of primary concern are ground water and surface water. It is evident that a release has occurred to the wetlands via the surface water. The surface water and sediment samples taken along the drainage pathway (ditch) and the wetlands area contain high levels of metals (Reference 9). These metals are present throughout the discharge area to the wetlands. The level for lead found in the surface water at the wetlands area in excess of the surface water pathway environmental AWQC/AALAC benchmark found in SCDM. An endangered species, an American alligator, has been reported to live in the wetlands at the site.

The releases to the shallow, non water supply ground water aquifer are documented. The potential for this contamination to enter the 50-foot aquifer exists. Should the contamination in the form of cadmium be able to migrate to the 50-foot aquifer or the 600-foot aquifer, the water supplies may be affected.

The soil is also an area of concern. Analytical evidence obtained during previous investigations indicate elevated levels of VOCs and metals are present in the on-site soils (Reference 9). This pathway is of concern because of the large number of on-site employees and a threatened species.

The rinsewater pond and sludge are a concern. Marginal sampling has been conducted of the sludge. Additional sampling may be critical in scoring this site for groundwater. An ESI may be necessary to evaluate the sludge in the pond.

## References

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4. U.S. Survey, 7.5-minute topographic quadrangle maps of Georgia: Homerville West, 1978, photo revised 1987; Homerville East, 1968, photo revised 1988; Du pont, 1971; Midway, 1994.
5. Carter, Robert F. And Harold R. Stiles., 1983, "Average Annual Rainfall and Runoff in Georgia," Hydrologic Atlas 9, United States Geologic Survey.
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8. Golder Associates Inc., Report on Additional Phase II Environmental Investigation at the Brockway Standard Facility, Homerville, Georgia, July 1994, 32 p.
9. Law Engineering and Environmental Services, Inc., Report of a Limited Sampling and Testing Program (Law Project #40544-6-7739), June 19, 1996, 4 p.
10. Superfund Chemical Data Matrix.
11. Law and Company Chemical Report for Sample #904792, dated December 7, 1987.
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13. Georgia Environmental Protection Divison, Water Resources Management Branch, City of Homerville Files.
14. Vest, William, City of Homerville Water Department, Interview, June 11, 1996.
15. J.L. Fanning, G.A. Doonan, and L.T. Montgomery, 1992, Water Use in Georgia by County for 1990, Georgia Geologic Survey Information Circular 90, 98 p.
16. Frost, Bob, Frost Associates, CENTRACTS Report for the Area within Four (4) Miles of the Brockway Standard Homerville Site.

1. *Chlorophytum comosum* L. (Liliaceae) -  
This plant is a common ground cover in the area. It has long, thin, strap-like leaves and small, white, star-shaped flowers. It is often found growing in shaded areas under trees.

2. *Asplenium nidus* L. (Aspleniaceae) -  
This is a large, evergreen fern with long, hanging fronds. It is often found growing on tree trunks or in shaded areas under trees.

3. *Sansevieria zeylanica* L. (Sansevieriaceae) -  
This is a succulent plant with thick, fleshy leaves. It is often found growing in dry, sandy areas or along roadsides.

4. *Crinum asiaticum* L. (Amaryllidaceae) -  
This is a bulbous plant with long, narrow leaves and clusters of bell-shaped flowers. It is often found growing in wet, shaded areas under trees.

5. *Clivia miniata* L. (Amaryllidaceae) -  
This is a bulbous plant with broad, lanceolate leaves and clusters of bright red flowers. It is often found growing in shaded areas under trees.

6. *Dieffenbachia seguine* Schott (Araceae) -  
This is a large, evergreen plant with thick, fleshy leaves. It is often found growing in shaded areas under trees.

7. *Monstera deliciosa* L. (Araceae) -  
This is a climbing plant with large, deeply lobed leaves. It is often found growing on tree trunks or in shaded areas under trees.

8. *Epipremnum aureum* (L.) L. (Araceae) -  
This is a climbing plant with heart-shaped leaves. It is often found growing on tree trunks or in shaded areas under trees.

9. *Sansevieria trifasciata* L. (Sansevieriaceae) -  
This is a succulent plant with thick, fleshy leaves. It is often found growing in dry, sandy areas or along roadsides.

10. *Chlorophytum comosum* L. (Liliaceae) -  
This plant is a common ground cover in the area. It has long, thin, strap-like leaves and small, white, star-shaped flowers. It is often found growing in shaded areas under trees.

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## **APPENDIX I**

U.S. EPA REGION IV

# SDMS

## Unscannable Material Target Sheet

DocID: 10715639

Site ID: GAD984209431

Site Name: Brockway Standard

Nature of Material:

Map:

Computer Disks:

Photos:

CD-ROM:

Blueprints:

Oversized Report:

Slides:

Log Book:

Other (describe): Topographic Quadrangle Map  
(Appendix 1: Plate 1)

Amount of material: \_\_\_\_\_

\* Please contact the appropriate Records Center to view the material \*



## **APPENDIX II**

**Golder Associates Inc.**

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**REPORT ON**

**ADDITIONAL PHASE II  
ENVIRONMENTAL INVESTIGATION AT  
THE BROCKWAY STANDARD FACILITY  
HOMERVILLE, GEORGIA**

July 1994

943-3627

2a.

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## 1.0 INTRODUCTION

Golder Associates was retained by Brockway Standard, Inc. (Brockway) to follow up on a prior Phase II investigation at the Homerville, Georgia facility (Site). The scope of the project was based on the Golder Associates "Proposal for Additional Phase II Environmental Investigation, Brockway Standard, Homerville, Georgia", dated February 18, 1994. This investigation is described and discussed in this report.

Section 2 presents the background information regarding the scope and conclusions from previous investigations, and information on the nearby drinking water and process water extraction wells. Section 3 presents the methodology used in this additional Phase II investigation and Sections 4 and 5 present the results and conclusions of this investigation. A Site location map and Site layout are shown respectively as Figure 1 and Figure 2.

## 2.0 BACKGROUND

### 2.1 Previous Investigations

ENVIRON Corporation of Arlington, Virginia (ENVIRON) conducted a limited Phase II investigation in April 1993 that is described in a report dated May 1993.

ENVIRON's Phase II program consisted of the installation of six groundwater monitoring wells, and collection of soil and sediment samples. The results of the investigation indicated the presence of volatile organic compounds (VOCs) in the groundwater and soils. The Phase II results also indicated the presence of elevated levels of metals, and total petroleum hydrocarbons (TPH) in the shallow soils and sediments, primarily along the railroad spur and around the western ditch system at the facility.

The ENVIRON Phase II investigation was limited to the shallow groundwater and to a limited suite of chemicals and ENVIRON concluded that there was insufficient information available on which to fully evaluate the extent of contamination at the facility.

The data generated in ENVIRON's investigation is included as Appendix A.

In March 1994, (after ENVIRON's investigation, but prior to the Additional Phase II investigation that is the subject of this report) Golder Associates conducted a limited investigation of the pond and production well at the facility. Golder Associates collected surface water and sediment samples from the on-site pond, and a sample from the on-site production well. The data indicated the possible presence of acetone in all the water samples, with bis(2-ethylhexyl)phthalate and 1,1-dichloroethene present below method detection limits in the lake water. Following later sampling and review of laboratory data, Golder Associates concluded that that the acetone results were artifacts of transport and not indicative of acetone in these samples of water collected at the site. The laboratory data sheets for these samples are also included in Appendix A.

## 2.2 Review of Production Well and Drinking Water Well Information

Golder Associates reviewed information relating to the Production Well at the facility and a nearby municipal well. The Brockway production well and a municipal well (Figure 2) located just to the west of the facility currently extract groundwater from the Ocala Limestone. The wells have a maximum depth of about 600 feet below ground surface (ft BGS). According to facility representatives, the production well was installed about 30 years ago, is used solely for process water, and is roughly 600 feet deep. As mentioned in Section 2.1, Golder Associates analyzed a sample from this well in March 1994. Acetone was the only volatile organic detected. Later sampling indicated that the acetone results were artifacts of sample transport as discussed in section 2.1. The municipal well located just west of the plant is cased to 360 ft BGS. Two water bearing zones have been identified in this well between 398 and 503 ft BGS and between 523 and 533 ft BGS. The water level prior to pumping was 122 ft BGS and is probably protected from local near surface contamination due to confining strata. Treated water (normal treatment by the municipality) from this municipal well has been tested for drinking water parameters by the City of Homerville and was found to be in compliance. In particular, no chlorinated organics, other than those usually associated with the chlorination process (not associated with the site chlorinated solvents) were detected.

### 3.0 METHODOLOGY

#### 3.1 General

The objectives of the additional Phase II investigation were to:

- Characterize the groundwater flow within the shallow aquifer;
- Further delineate the nature and horizontal and vertical extent of contamination in groundwater, including potential impacts on the "drinking water aquifer"; and
- Locate and delineate the contaminant source areas.

Several techniques were used during the additional Phase II investigation to achieve these objectives. They consisted of installing and sampling additional groundwater monitoring wells, sampling groundwater and soils using a hydraulic probe system, soil gas sampling, and sampling surface water, soils and sediments.

Analysis of groundwater, soils, and soil gas was performed initially with an on-site field gas chromatograph setup to identify some of the chlorinated solvents of concern, specifically tetrachloroethene (PCE), trichloroethene (TCE), both cis- and trans-1,2-dichloroethene (C-DCE and T-DCE), and toluene. Selected samples of the various media were also sent for fixed laboratory analysis at ACL Laboratories, Inc. of Atlanta (ACL). The analyses performed at ACL covered a wider range of tests incorporating the target analyte and target compound lists (TAL and TCL).

Samples were labelled according to their type or method of collection and depth where appropriate as follows:

- MW - groundwater
- HP - hydraulic probe
- SG - soil gas
- VSS - sediment sample
- VSB - surface soil
- DD - surface water

For example, sample HP-1-10 was the first hydraulic probe location sampled at a depth of 10 feet.

Selection of sampling locations generally followed the plan provided in Golder Associates' proposal with sampling locations being refined as appropriate based on results obtained in the field. All sampling, well installation, and other activities were conducted in general accordance with the U.S. EPA Region IV Standard Operating Procedures.

### 3.2 Decontamination

Decontamination of all sampling equipment and materials used during the investigation was conducted to minimize the potential for contributing contamination to the environment, and to minimize the potential for cross-contamination of samples.

Prior to and upon arrival at the Site, the drill rig, augers and drilling all tools were thoroughly cleaned using a portable steam cleaner. Rinsing and steam cleaning was also completed prior to moving to each new monitoring well location. Also, between sampling operations, the split-spoon samplers were decontaminated using the procedures outlined below.

1. Wash with a solution of non-ionic detergent (Alconox®) ;
2. Rinse with steam/water;
3. Rinse with distilled water;
4. Air dry; and
5. Wrap with aluminum foil (if not to be used immediately).

Probes, drilling equipment and tools which contacted the soil or were placed into borings or probe holes were washed with a solution of non-ionic detergent and thoroughly steam cleaned between uses. All drilling equipment placed over the borehole locations was free of petroleum-based lubricants. Water generated during decontamination activities was collected and discharged into the plant wastewater treatment facility.

### 3.3 Soil Boreholes and Monitoring Wells

Seven soil boreholes were made at the locations indicated on Figure 2 and converted into new monitoring wells (MW-3A, and MW-7 through MW-12).

Drilling for the boreholes was performed using hollow stem augers. Soil sampling was performed utilizing a split-spoon sampler driven ahead of the auger drill bit following the methodology of Standard Penetration Test (ASTM D-1586) procedures. All drilling, logging and sampling activities were monitored and documented by experienced Golder Associates field personnel. The field personnel were responsible for observing, logging, collecting, and properly labeling samples as they were removed from the ground, as well as supervising all field activities.

New monitoring wells MW-7 through MW-12 and MW-3A were constructed of two-inch diameter PVC well materials and have ten-foot screens. Specific installation depths of each monitoring well were dependent on the occurrence of clay units. Boring and well logs are included as Appendix B.

Monitoring wells were constructed using a graded silica sand pack at the screened interval. The annular space above the sand pack was filled with three to four feet of bentonite pellets, then grouted to about the surface with a cement/bentonite grout, which will serve as a borehole seal. The top six to 12 inches was fitted with a protective cover and a concrete pad at the ground surface.

The new monitoring wells were developed by a combination of a diaphragm pump, and by manual bailing of the groundwater. Development continued until at least three standing water column volumes were removed, and field measurements of pH, conductivity and temperature indicated stabilization.

Following development, field permeability testing using variable head (slug test) techniques were completed in the new monitoring wells. On-site field personnel were responsible for documentation of all development and slug testing activities. All data was reduced and keyed into a computer format for presentation, complete with hydraulic conductivity calculations and variable head test plots. Data and results of the slug test are

included in Appendix C. Water elevations in all the site monitoring wells were measured using an electronic water level indicator. Well construction details and water elevations are tabulated in Table 3-1.

All new monitoring wells and existing monitoring well MW-3 were sampled for field GC screening and for analysis by ACL. Each well was purged prior to sampling by withdrawing at least three casing volumes of groundwater with a decontaminated stainless steel bailer secured with clean, unused polypropylene rope or a diaphragm pump. The pH, specific conductance, and temperature of the water were measured before and after sampling each well. Sample water was withdrawn from each well using a stainless steel bailer and poured directly into the sample containers. The volatile fraction was collected first. Care was taken while obtaining the volatile fraction to ensure that aeration of the sample was minimized and to ensure that no headspace remained in the vials.

### 3.4 Soil and Groundwater Sampling Using Hydraulically or Percussion Driven Probes

Subsurface soil and groundwater samples were collected using a hydraulic impact sampling system (Golder Associates' LW Sampler System) or by Bosch percussion drill. Twenty six locations around and underneath the facility building were investigated, labelled HP-1 through HP-20 (installed by LW system), and SG-1 through SG-6 (installed by Bosch percussion system) on Figure 2.

A decontaminated "Kansas sampler" with retractable drive point was attached to a hollow probe rod, which was driven into the ground using the truck mounted hydraulic impact hammer (or inside the building, a hand held hydraulic impact hammer). The sampler was driven to the desired depth, then the drive point was retracted. The sampler was then driven until it became full of soil, then the entire probe was pulled out of the hole. The soil sample was then extruded for examination and analysis. A decontaminated sampler was then reattached to the probe rod, reinserted into the hole, and advanced to the next sampling interval, where the sampling procedure was repeated. Sampling personnel removed soil samples from the sampler while wearing clean, latex gloves.

Groundwater samples were collected from the probe locations using a decontaminated small bore stainless steel bailer which was lowered slowly down through the probe rod

TABLE 3-1  
WELL CONSTRUCTION SUMMARY  
AND WATER LEVEL ELEVATIONS MEASURED IN APRIL 1994  
BROCKWAY STANDARD  
HOMERVILLE, GEORGIA

Well	Top of Casting Elevation FT. MSL	Ground Surface Elevation FT. MSL	Well Depth FT.	Well Bottom Elevation FT. MSL	Top of Screened Internal Elevation FT. MSL	Depth to Water FT. BGS	Water Level Elevation FT. MSL
MW-1	176.59	176.77	16.5	160.27	175.27	2.07	174.52
MW-2	180.44	180.58	20	160.58	175.58	4.89	175.55
MW-3	178.18	178.41	17	161.41	176.41	NA	NA
MW-4	176.92	177.16	18	159.16	174.16	2.19	174.73
MW-5	179.49	179.78	17	162.78	177.78	3.58	175.91
MW-6	183.05	180.31	17	163.31	178.31	6.87	176.18
MW-7	179.73	179.79	25.8	153.99	163.99	4.07	175.66
MW-8	179.76	177.16	40	137.16	147.16	5.58	174.18
MW-9	180.18	177.6	29.7	147.9	157.9	5.93	174.25
MW-10	178.98	176.6	25	151.6	161.6	4.83	174.15
MW-11	180.69	178.23	25	153.23	163.23	6.47	174.22
MW-12	178.73	179.23	25	154.23	164.23	2.76	175.97
MW-3A	177.95	178.19	20	158.19	168.19	3.34	174.61

NOTES: FT. MSL = Feet above mean sea level.

FT. BGS = Feet below ground surface.

NA = Not measured due to presence of non aqueous phased liquid.

MW-1 through MW-6 Installed In April 1994 by ENVIRON Corporation.

MW-7 through MW-12 and MW-3A Installed In April 1994 by Golder Associates.

FN: 3-1.WK1994-3627VJU

in order to minimize aeration. The bailer was secured with a clean, polypropylene cord. Sampling personnel wore new clean, disposable powderless latex gloves at each sample location and depth.

### 3.5 Surface Water Sampling

Three surface water samples were collected. Sampling locations were from a production water discharge point prior to entry to the sewer system (DD-1), the lagoon, and the lake. Samples were collected at each location by dipping the sample container into the surface water and allowing the water to slowly enter the neck of each container.

### 3.6 Soil Gas Survey

A soil gas survey was performed at six locations beneath the main facility building. Those locations are marked SG-1 through SG-6 on Figure 2.

The soil gas sampling train consisted of a steel probe with a drive point and slotted end section, a sampling pump, a tedlar bag, and polyethylene tubing to connect the probe with the other parts. A small diameter hole (two inches or less) was drilled through the concrete floor in the plant building to a depth of between 6 and 12 inches beneath the floor surface. The probes were then sealed in the facility floor surface using bentonite paste to restrict air flow through the annular space, which could dilute the samples. High density polyethylene (HDPE) tubing was used to connect the probe to a total volatiles meter (Microtip) and a Tedlar bag. The Microtip extraction pump was initially used for a short period of time to purge the probe and tubing of air prior to collecting samples. Soil gas representative of the subfloor was considered to be flowing when the total VOC measurement has stabilized. Once this stabilized reading was reached, a Tedlar bag was attached to the tubing and filled with soil gas by evacuating a sealed container containing the tedlar bag. Soil gas samples were analyzed with the field GC.

### 3.7 Surface Soil/Sediment Sampling

Surface soil (VSB-1 through VSB-8) and sediment (VSS-1 through VSS-5) samples were collected from locations shown on Figure 2. The surface of the ground at each surface soil sampling location was cleared of vegetation, rootmat, grass, leaves, and other debris using a decontaminated steel spoon. Grab samples were then collected from the top six inches of soil with another decontaminated stainless steel spoon or hand auger, depending on the actual location. Sampling personnel wore new, disposable, powderless latex gloves. All soil, water, sediment, and soil gas samples were analyzed using the Photovac 10S70 gas chromatograph, (field GC) equipped with a CPSil-5 capillary column and a 10.6 eV lamp and photoionization detector.

Sediment samples were obtained from drainages, streams, and ponds. The sediment samples were collected using a decontaminated stainless steel spoon.

### 3.8 Field GC Screening Procedures

Samples were screened in the field using a Photovac 10S70 GC. This instrument has an isothermal column oven and a provision for automatic backflushing, allowing rapid sample turnaround. Samples were analyzed for PCE, TCE, C-DCE, T-DCE, and toluene. Samples were introduced into the field GC by direct injection of the headspace in the sample vial.

The retention times and areas of the chromatographic peaks were compared to the retention times and areas of standards prepared using PCE, TCE, C-DCE, T-DCE, and toluene in order to identify and quantify the samples. The oven temperature was set at about 30 degrees Celsius for all analytical runs. The constituents, as identified by retention time comparison, were quantified using an integrator contained in the instrument. When the known retention time of PCE, the latest elutor, had elapsed during the analysis of an investigative sample, the column was backflushed to remove other, later eluting compounds that may have been retained on the column.

Water samples for field GC analysis were collected directly into 40-ml sample vials. Approximately 15 ml of water was placed in the vial that was then sealed. The vials were

kept at ambient temperature to allow the headspace to equilibrate with the sample. Similarly, approximately ten grams of sample soil were placed in 10 ml HPLC grade water and the soil/water/headspace matrix was allowed to equilibrate prior to analysis. Measured standard solutions of the volatiles of concern were made for the soil and water matrices in a similar way.

### 3.9 Analytical Laboratory Procedures

Select soil and water samples collected during the investigation were analyzed by ACL Laboratories Inc, of Atlanta using analytical procedures from SW-846, "Test Methods for the Evaluation of Water and Wastewater" and other EPA approved methods. Table 3-2 lists the analytical methods together with preservatives used.

TABLE 3-2  
ANALYTICAL METHODS AND PRESERVATIVES USED

ANALYTE	METHOD	PRESERVATIVE
TCL - Volatile Organics	SW-846 Method 8240	HCl for water Ice
TCL - Semi-Volatile Organics	SW-846 Method 8270	Ice
TCL - Pesticides and PCBs	SW-846 Method 8080	Ice
TAL - Metals	TAL Metals	HNO3 for water Ice
Total Petroleum Hydrocarbons	418.1	Ice

Samples collected for analytical laboratory analyses were packed in a cooler with ice and a completed chain-of-custody form and sent by overnight courier to the laboratory.

Quality control procedures for sampling and field analytical operations consisted of collection and analysis of QC samples, calibration of instruments, and analysis of laboratory QC samples.

### 3.10 Quality Assurance/Quality Control (QA/QC)

The quality assurance/quality control (QA/QC) program for this investigation was instituted to produce data of known quality. These activities provided information regarding the accuracy and precision of field analytical measurements, and the general utility of the data which was produced.

During soil and water sampling, two duplicate samples were collected for analysis by the field GC. One trip blank per shipment, which was prepared by the analytical laboratory, was analyzed for VOCs. Duplicate injections and blank injections on the field GC were performed at least once per day to assess the accuracy and reproducibility of the field GC results.

### 3.11 Land Survey

After completing drilling operations, the elevation of each monitoring well was determined to an accuracy of  $\pm 0.01$  feet while the horizontal location was determined to an accuracy of  $\pm 0.1$  feet. The surveying work was completed by Mayes, Sudderth & Etheredge, a licensed surveyor under subcontract to Golder Associates.

#### 4.0 RESULTS

##### 4.1 Geology / Hydrogeology

###### 4.1.1 Regional Information based on Municipal Well

The hydrostratigraphy of the Site is predominantly interlayered unconfined sand and clay water bearing units, overlying more distinct confined aquifers, which overlay the main drinking water aquifer for Florida, which is termed the Ocala Limestone. The stratigraphy in the vicinity of the site has been taken from the drilling log of the municipal well located immediately west of the plant at an elevation of 180.93 feet. As reported in the drilling log, the first 8 feet is topsoil, then sand to 23 ft BGS. From 23 ft BGS to 73 ft BGS is soft blue clay, then a firm clay to 123 ft BGS, followed by a clay with sand streaks to 203 ft BGS. A blue marl is present from 203 ft BGS to 263 ft BGS, then sandstone to 303 ft BGS. Hard grey limerock is present from 303 ft BGS to 328 ft BGS, followed by shell with mud and sand to 343 feet. From 342 ft BGS to the bottom of the hole at 604 ft BGS are various limestones. Water bearing zones were noted in soft cavernous limerock at a depth between 398 ft BGS and 503 ft BGS, and in soft grey limestone at between 523 feet and 533 feet BGS. A casing was installed to 360 ft BGS and water flowed up the open hole and into the casing to stand at 122 feet BGS. The well was test pumped at 800 gallons per minute for 4 hours which resulted in a drawdown of 15 feet. A pump rated at 500 gallons per minute was then installed with a pumping level of 134 ft BGS.

###### 4.1.2 New Well Boring Descriptions

The following wells were newly installed in the course of Golder Associates' field work:

Boring MW-3A was drilled and completed as monitoring well MW-3A because non-aqueous phase liquids were detected in nearby monitoring well MW-3 during this investigation. During the drilling and logging of MW-3A, a shallow clay layer was detected at a depth of about 4 ft BGS to 9 ft BGS. From a depth of 9 ft BGS to 21 ft BGS, a fine sand grading into a fine gravel was encountered. Monitoring well MW-3A was installed and sealed below the clay layer to isolate the monitoring well from the ground surface and also to provide a slightly deeper monitoring point for detection of potential contamination. MW-3 and MW-3A are about 30 feet apart.

The boring for MW-7 is 26 ft BGS and completed in sand. Water entered the augers during drilling at 21 ft BGS and flowed up the augers to 18 ft BGS suggesting a locally partial confined unit or simply loose sand. Golder Associates advised to continue the boring and screen across this zone. The well was installed in the boring to 25.8 ft BGS with a ten foot screen.

The boring that was to be used for MW-8 was 40 ft BGS and completed 0.1 ft into clay. Golder Associates concluded that a good quality well could not be set in the augers due to running sand. Hence the hole was cemented closed using pressure grouting from the bottom of the hole and a new hole was drilled to 43 ft BGS about 10 feet from the original boring for MW-8. This hole was advanced from 40 ft BGS to 43 ft BGS in clay. The boring was backfilled to 40 ft BGS with sand and a well screen was set between 40.0 ft BGS to 30.0 ft BGS. The presence of sand to 39.9 ft BGS, when contrasted with the presence of clay in the nearby municipal well at a relative depth of 21.8 feet, provides evidence that a shallow clay layer may not be continuous at the site. The shallow clay layer which is present at both MW-3 and MW-3A, was not present at MW-8. MW-8 is about 100 feet to the southwest of MW-3A.

The borings for wells MW-9 through MW-12 were advanced until the soils would likely provide a water bearing unit of at least ten feet, with the bottoms of their screens at least 25 ft BGS. This specification was selected to intercept potentially impacted shallow waters. The basis for the selection of the bottom of the screen depth of 25 ft BGS was the potentiometric gradient derived from the preceding wells. The wells were completed as noted in the well summary table.

In all, thirteen monitoring wells have been constructed at the site. A well construction summary table for the site wells is presented on Table 3-1. Wells MW-1 through MW-6 are between 18 ft BGS and 20 ft BGS. All have 15 foot screens and primarily comprise fill and sandy materials with some clays and silts.

#### 4.1.3 Groundwater Flow

Topographic maps of the area show the ground surface elevation reduces in a southeasterly direction, that the area is surrounded by wetlands, and a lake is adjacent to the west of the Site buildings.

A potentiometric map showing the postulated lateral movement of shallow groundwater at the site and based on measurement of water elevations in the site monitoring wells is included as Figure 3. Shallow groundwater at the Site flows toward the south west at the northern portion of the site. The gradient then flattens and groundwater flows in locally complex paths to the west near the pond, and in any direction from west through south to east at a particular discrete location in the southern portion of the site. However, overall lateral flow at the site is from north to south.

Vertical gradients (downward movement of groundwater) at the site have not been determined at this time, except in the area of MW-3A and MW-8 where there is a downward gradient. The difference in water level is 0.43 feet, which is much greater than would be expected based on the difference between these wells and the lateral gradients noted at the site. The vertical gradient at this location could be caused by the lack of shallow clay at MW-8 compared with MW-3A, and the greater depth (20 feet) of MW-8 compared with MW-3A.

#### 4.1.4 Permeable Zones and Aquitards

The existing wells all have high permeability zones which, when combined with chemistry data, show there is substantial lateral hydraulic continuity across the Site. Examination of the boring logs from the thirteen site wells, to a maximum depth of 40 ft BGS, indicates no continuous low permeability unit to restrict flow of water to depth. However, the log of the municipal well immediately west of the site reports fifty feet of soft blue clay between 23 ft BGS and 73 ft BGS. The pond and the soft blue clay found in the municipal well may act as a hydraulic, and a low permeability barrier respectively, to retard lateral flow of contaminants off-site to the west and possibly south west. No barrier has been postulated to prevent the shallow migration of contaminants to the south or south east.

#### 4.1.5 Hydraulic Conductivity from Slug Test

A simple estimate of the hydraulic conductivity of the shallow soils was made using slug test techniques. The results for wells MW-7 through MW-12 are presented in Appendix C. These show typical ranges as expected for shallow soils in the area. Wells in these soil are likely to yield sustainable flows of water. This data will be used to design any pump test performed if a groundwater extraction remedial solution is ultimately selected for this site.

#### 4.2 Analytical Results

Results of the laboratory analyses are presented in the following discussions. Field GC data and a results summary are included in Appendix D. Laboratory data are included in Appendix E. For ease of reading, the names of many of the chlorinated organic compounds have been abbreviated in the discussion. A list of names and abbreviations follows:

1,1-dichloroethene	11-DCE
1,1-dichloroethane	11-DCA
1,2-dichloroethane	12-DCA
1,1,1-trichloroethane	111-TCA
trichloroethene	TCE
1,1,2-trichloroethane	112-TCA
tetrachloroethene	PCE
cis-1,2-dichloroethene	C-DCE
trans-1,2-dichloroethene	T-DCE

Some comparison of results obtained with the regulatory standards that exist for those media has been shown on the results tables and discussed in the text. In particular, groundwater results have been compared with the federal maximum contaminant levels (MCLs) for drinking water. Soil concentrations have been compared with the Georgia Hazardous Site Response Act Notification Concentrations (NCs). Surface water concentrations have been compared with the Georgia Ambient Surface Water criteria for the protection of aquatic life.

#### 4.2.1 Groundwater Data

Groundwater was collected from:

- The new on-site monitoring wells, MW-3, and the on-site production well with laboratory data reported in Table 4-1; and
- The hydraulic probe and soil gas locations with laboratory data reported in Table 4-2.

##### 4.2.1.1 Monitoring Wells

The above-listed monitoring wells were sampled and analyzed for Superfund Target Compound List Volatile Organic Compounds (TCL VOCs) by SW-846 Method 8240. Upgradient wells MW-7 and MW-12, installed to depths of 25.8 ft BGS and 25.0 ft BGS respectively, both reported no detections of VOCs. Also the on-site production well at a depth of approximately 600 feet BGS reported no detections of VOCs.

MW-3A and MW-8 through MW-11 all reported detections of chlorinated VOCs with the highest concentration in all cases being 11-DCE.

When sampling existing well MW-3, a light non-aqueous phase liquid (LNAPL) was found in the well. The aqueous phase underneath the LNAPL was analyzed by ACL and reported toluene, ethyl benzene and xylene (TEX) all below MCLs and chloroethane (937 ug/l) and 11-DCA (761 ug/l). A new well, MW-3A was installed about 20 feet away, to 20 ft BGS and reported several chlorinated VOCs, primarily 11-DCE (6,210 ug/l), C-DCE (1,530 ug/l), and 11-DCA (1060 ug/l). Other chlorinated VOCs reported in this sample above MCLs included vinyl chloride and TCE.

MW-8, to a depth of 40.0 ft BGS, reported vinyl chloride at 35 ug/l, 11-DCE at 783 ug/l, 11-DCA at 118 ug/l, TCE at 153 ug/l, and C-DCE at 60 ug/l. Monitoring well MW-8 was installed in the vicinity of and downgradient of existing monitoring well MW-3.

Monitoring wells MW-9 and MW-10 were installed in the southern portion of the Site to depths of 29.7 ft BGS and 25.0 ft BGS, respectively. The groundwater sample collected

TABLE 4-1  
LABORATORY DETECTIONS FROM WELLS  
BROCKWAY STANDARD  
HOMERVILLE, GEORGIA

Samples collected April 1994

Compound	MCL	Sample Identification										Prod. Well
		MW-3	MW-3A	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12			
<b>TCL VOLATILES (ug/l)</b>												
vinyl chloride	2	ND	550	ND	35	12	14	ND	ND	ND	ND	ND
chloroethane	--	937	ND	ND	ND	17	11	ND	ND	ND	ND	ND
1,1-dichloroethene	7	101 J	6210	ND	783	393	307	3250	ND	ND	ND	ND
1,1-dichloroethane	--	761	1060	ND	118	337	283	199	ND	ND	ND	ND
1,2-dichloroethane	5	ND	38 J	ND	ND	3 J	3 J	19 J	ND	ND	ND	NO
2-butanone	--	ND	496 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	200	ND	135	ND	ND	28	72	2670	ND	ND	ND	ND
trichloroethene	5	ND	253	ND	153	97	12	639	ND	ND	ND	NO
1,1,2-trichloroethane	5	ND	ND	ND	ND	ND	ND	15 J	ND	ND	ND	ND
benzene	5	88 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tetrachloroethene	5	ND	ND	ND	ND	ND	ND	8 J	ND	ND	ND	ND
toluene	1000	522	196	ND	ND	ND	ND	107	ND	ND	ND	ND
ethylbenzene	700	167	58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
xylenes	10000	7520	2360	ND	ND	9	4 J	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	70	ND	1530	ND	60	12	15	118	ND	ND	ND	ND
<b>TAL METALS (mg/l)</b>												
aluminum	0.05-0.2	NA	NA	128	60.5	38.8	47	23	80.7	NA	NA	NA
barium	2	NA	NA	0.18	0.11	0.17	0.14	0.12	0.36	NA	NA	NA
calcium	--	NA	NA	7.72	6.88	14.1	6.98	5.13	17.4	NA	NA	NA
chromium	0.1	NA	NA	0.13	0.07	0.17	0.09	0.03	0.16	NA	NA	NA
copper	1.3	NA	NA	0.06	ND	0.02	ND	ND	0.04	NA	NA	NA
iron	0.3	NA	NA	23.1	12	19.3	28.9	12	51.1	NA	NA	NA
lead	0.015	NA	NA	0.09	0.1	1.23	0.07	ND	0.1	NA	NA	NA
magnesium	--	NA	NA	5.08	3.24	4.36	4.72	2.6	7.98	NA	NA	NA
manganese	0.05	NA	NA	0.14	0.12	0.15	0.12	0.12	0.72	NA	NA	NA
potassium	--	NA	NA	2.5	6.52	1.9	1.36	1.64	3.4	NA	NA	NA
sodium	--	NA	NA	5.85	57	38.4	0.21	10.9	15.2	NA	NA	NA
vanadium	--	NA	NA	0.09	0.07	0.07	0.09	ND	0.12	NA	NA	NA
zinc	5	NA	NA	0.1	0.16	0.23	0.1	0.06	0.13	NA	NA	NA
TCL SVOCs		NA	NA	ND	ND	NA	ND	ND	ND	NA	NA	NA
TCL Pests/PCBs		NA	NA	NA	ND	NA	ND	ND	ND	NA	NA	NA

Notes: Only detections are reported in this table.

J - indicates a value reported below the detection limit.

--- - indicates that there is no MCL for the compound.

MCL - maximum contaminant level from Federal Drinking Water Regulations

NA - parameter not analyzed for.

ND - not detected.

MW-3 floating layer reported as fuel oil in mineral spirit range.

FN: 4-1.WK1\943-3627\AJ

from MW-9 reported vinyl chloride at 12 ug/l, chloroethane at 17 ug/l, 11-DCE at 393 ug/l, 11-DCA at 337 ug/l, 111-TCA at 28 ug/l, TCE at 97 ug/l, xylene at 9 ug/l, and C-DCE at 12 ug/l.

The groundwater sample collected from MW-10 reported vinyl chloride at 14 ug/l, chloroethane at 11 ug/l, 11-DCE at 307 ug/l, 11-DCA at 283 ug/l, 111-TCA at 72 ug/l, TCE at 12 ug/l, and C-DCE at 15 ug/l.

The highest concentrations of VOCs were reported in MW-11 where elevated detection limits were required thereby likely masking some of the VOC detections. The groundwater sample collected from MW-11 reported 11-DCE at 3,250 ug/l, 11-DCA at 199 ug/l, 111-TCA at 2670 ug/l, TCE at 639 ug/l, and C-DCE at 118 ug/l. Monitoring well MW-11 was installed to the west of the finished goods warehouse near the lake to a depth of 25.0 ft BGS.

Four of the nine sampled wells were analyzed for pesticides and PCBs and none were detected.

Five of the nine sampled wells had samples collected and analyzed for semi volatile organics and none were detected.

Six of the nine sampled wells had samples collected for TAL metals. Samples were collected unfiltered and the following discussion presents those metals with concentrations reported above the upgradient wells, MW-7 and MW-12. On-site wells MW-10 and MW-11 reported no metals above those reported in the upgradient wells. Monitoring well MW-8 reported potassium at 6.52 mg/l, and zinc at 0.16 mg/l, although these concentrations do not exceed any published MCLs. Monitoring well MW-9 reported chromium at 0.17 mg/l, lead at 1.23 mg/l, sodium at 38.4 mg/l, and zinc at 0.23 mg/l. Both chromium and lead in MW-9 are reported above their MCLs/action levels of 0.1 mg/l and 0.015 mg/l, respectively.

#### 4.2.1.2 Hydraulic/Percussion Probe Locations

Groundwater from nine probe locations was submitted for laboratory analysis for VOCs. A tenth groundwater sample from SG-3 had a globule non-aqueous phase liquid (NAPL) incorporating sediment that flowed like colored lava lamp fluid. This sample was not sent for analysis following a scan for compounds on the field GC when only toluene was reported. Since little noise was observed on the field gas chromatogram, it is likely that this NAPL consists of saturated aliphatic hydrocarbons with a small amount of toluene.

The probe location HP-1 was believed to be in a clean area. A confirmatory probe was installed to a depth of approximately ten ft BGS. A groundwater sample collected from the probe reported no VOCs.

The probe location HP-9 was installed to a depth of approximately ten ft BGS. A groundwater sample reported several VOCs including vinyl chloride at 131 ug/l, chloroethane at 63 ug/l, 11-DCE at 201 ug/l, 11-DCA at 61 ug/l, 12-DCA at 8 ug/l, TCE at 21 ug/l, and C-DCE at 94 ug/l.

The probe location HP-12 was installed between the raw material warehouse and MW-12 to a depth of approximately ten ft BGS. A groundwater sample collected from the probe indicated the presence of low levels (below MCLs) of benzene, toluene, ethylbenzene, and xylenes. No chlorinated VOCs were detected.

The probe locations HP-17 and HP-18 were installed to a depth of ten ft BGS near the western side of the finished goods warehouse. The probe location HP-17 reported 11-DCE at 54 ug/l, 11-DCA at 25 ug/l, and 111-TCA at 7 ug/l. The probe location HP-18 reported vinyl chloride at 724 ug/l, 11-DCE at 140 ug/l, 11-DCA at 120 ug/l, TCE at 2,940 ug/l, and C-DCE at 4,320 ug/l.

The probe location HP-20 was installed just north of the small lagoon to an approximate depth of ten ft BGS. VOCs were not reported above the MCLs, but 2-butanone at 1580 ug/l and toluene at 802 ug/l were detected.

APPENDIX A  
IMAGE STORED DATA FROM THE TWO INVESTIGATIONS

TABLE 4-2  
LABORATORY DETECTIONS FROM GROUNDWATER PROBES  
BROCKWAY STANDARD  
HOMERVILLE, GEORGIA

Compound	TCL VOLATILES ( $\mu\text{g/l}$ )	MCL	Samples Collected April 1994	Sample Identification	HP-1	HP-9	HP-12	HP-17	HP-18	HP-20	SG-4-5	SG-5-4	SG-6-10
viny chloride	2	ND		ND	131	ND	ND	ND	724	ND	7 J	ND	8820
chloroethane	--	ND		ND	63	ND	ND	ND	ND	ND	62	ND	ND
methylene chloride	7	ND		ND	201	ND	54	140	ND	ND	ND	ND	81
1,1-dichloroethene	--	ND		ND	61	ND	25	120	ND	ND	ND	ND	9840
1,1-dichloroethane	--	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	5440
trans-1,2-dichloroethene	100	ND		ND	ND	ND	ND	12 J	ND	ND	ND	ND	59
1,2-dichloroethane	5	ND		ND	8	ND	ND	ND	ND	ND	ND	ND	408
2-butanone	--	ND		ND	ND	ND	ND	ND	1580 J	ND	ND	ND	ND
1,1,1-trichloroethane	200	ND		ND	ND	ND	7	ND	ND	ND	ND	ND	360
trichloroethene	5	ND		ND	21	ND	ND	2940	ND	ND	ND	ND	69
1,1,2-trichloroethane	5	ND		ND	2 J	ND	ND	ND	ND	ND	ND	ND	27 J
benzene	5	ND		ND	4 J	ND	ND	ND	ND	ND	4 J	ND	ND
tetrachloroethene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	149
toluene	1000	ND		ND	37	ND	ND	ND	ND	ND	4 J	ND	99
ethylbenzene	700	ND		ND	20	ND	ND	ND	ND	ND	40	ND	ND
xylenes	10000	ND		ND	99	ND	ND	802	4 J	ND	423	36 J	4350
cis-1,2-dichloroethene	70	ND		ND	94	ND	4320	ND	ND	ND	ND	ND	ND
TCL Pests/PCBs		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexane ( $\mu\text{g/l}$ )		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH ( $\mu\text{g/l}$ )		NA		NA	NA	NA	NA	NA	NA	NA	189	NA	NA

Notes: Only detections are reported in this table.

J - Indicates a value reported below the detection limit.

-- Indicates that there is no MCL for the compound.

MCL - Maximum Contaminant Level from Federal Drinking Water regulations

NA - parameter not analyzed for.

ND - not detected.

Groundwater samples collected from SG-4, SG-5, and SG-6 were sent to ACL for analysis for TCL VOCs. Chlorinated VOCs were detected above MCLs in SG-4 and SG-6. SG-4 reported chloroethane at 62 ug/l. SG-6 reported vinyl chloride at 8820 ug/l, methylene chloride at 81 ug/l, 11-DCE at 9840 ug/l, 11-DCA at 5,440 ug/l, T-DCA at 59 ug/l, 12-DCA at 408 ug/l, 111-TCA at 360 ug/l, TCE at 69 ug/l, PCE at 149 ug/l, and C-DCE at 4350 ug/l. Results from SG-5 indicated low levels of benzene, toluene, ethylbenzene, and xylenes, but no chlorinated VOCs.

Probe location HP-9 was also analyzed for pesticides and PCBs with no detections reported.

Probe location SG-5 also reported 189 ug/l hexane and 3,400 ug/l TPH.

#### 4.2.2 Surface Water

Three surface water samples were collected. DD-1 was collected from near a plant cooling water discharge point. Also samples were collected from the on-site lagoon and from in the pond, labelled "LAGOON" and "LAKE2", respectively. The results of these surface water samples are presented in Table 4-3. Sample DD-1 and the sample from the lake were analyzed for VOCs. No detections were reported except for 4 ug/l (below the method detection limit) of 11-DCE in the lake sample. The ambient surface water criteria for 11-DCE is 3.2 ug/l. However, since the reported value was a "J" value, it cannot be legitimately compared to any standard.

Metals were analyzed in the sample from DD-1 and the lagoon. The only metal exceeding the ambient water criteria was zinc. Zinc was present at 0.26 mg/l in DD-1 and at 0.12 mg/l in the lagoon. The ambient surface water criteria for zinc varies between 0.06 mg/l and 0.1 mg/l, depending on hardness.

**TABLE 4-3**  
**LABORATORY DETECTIONS FROM SURFACE WATER**  
**BROCKWAY STANDARD**  
**HOMERVILLE, GEORGIA**

Samples collected April 1994

Compound	Sample Identification			
	SW	DD-1	LAGOON	LAKE 2
TCL VOLATILES (ug/l)				
1,1-dichloroethene	3.2	ND	NA	4 J
TAL METALS (mg/l)				
aluminum	-	ND	0.83	NA
barium	-	0.03	0.03	NA
calcium	-	35.9	33.2	NA
iron	-	ND	0.8	NA
magnesium	-	14.6	13.6	NA
potassium	-	1.4	1.57	NA
sodium	-	8.12	8.65	NA
zinc	0.06 - 0.1	0.26	0.12	NA

Notes: Only detections are reported in this table.

J - indicates a value reported below the detection limit.

-- - indicates that there is no MCL for the compound.

SW - Surface Water Criteria - GA Water Quality Regulations Instream Criteria  
 (metals concentrations criteria very with total hardness)

NA - parameter not analyzed for.

ND - not detected.

FN: 4-3.WK1\943-3637\AJ

#### 4.2.3 Soil/Sediment Data

##### 4.2.3.1 Surface Soil

Surface soil samples were collected from eight locations around the Site, as indicated on Figure 2. Laboratory detections in surface soil are presented in Table 4-4.

Samples VSB-1 and VSB-2 were collected near the lithography building north of Highway 84. No VOCs were reported in these samples. Samples VSB-3, VSB-4, VSB-5, and VSB-6 were not analyzed at the laboratory, although the field GC reported low levels of T-DCE (up to 50 ug/kg) in these samples.

Background soil samples 1 and 2 were collected to determine background metals concentrations in the soil. Surface soil sample VSB-2 collected near the Lithography building was analyzed for metals and reported several metals above the background samples. None of these detections were above reportable soil concentrations as provided under the Georgia Hazardous Site Response Act. This sample was also analyzed for semi-volatile organics and reported no detections.

##### 4.2.3.2 Subsurface soil

Samples of soil from probes SG-6, SG-5, and HP-9 were collected and sent for laboratory analysis. The laboratory detections are presented in Table 4-5. The sample from SG-5 was collected from approximately four ft BGS. and was analyzed for TPH, reporting 89.6 mg/kg TPH. The sample from SG-6 was also collected at approximately four feet below the floor surface and was analyzed for TCL VOCs. Several VOCs were detected at levels below Georgia Hazardous Site Response Act Notification Concentrations. Several metals were also detected, with concentrations similar to background levels. The SVOC 4-methylphenol was reported at 550 ug/kg, well below the Georgia notification concentration of 3,800 ug/kg. The sample from HP-9 was analyzed for TCL pesticides/PCBs. Pesticides/PCBs were not detected.

**TABLE 4-4**  
**LABORATORY DETECTIONS IN SURFACE SOIL**  
**BROCKWAY STANDARD**  
**HOMERVILLE, GEORGIA**

Samples collected April 1994

Compound	NC	Sample Identification							
		Bgrd 1	Bgrd 2	VSB-1	VSB-2	VSB-3	VSB-4	VSB-5	VSB-6
TCL VOLATILES		NA	NA	ND	ND	NA	NA	NA	NA
TCL SEMIVOLATILES		NA	NA	NA	ND	NA	NA	NA	NA
TAL METALS (mg/kg)									
aluminum	--	2500	612	NA	3920	NA	NA	NA	NA
calcium	--	416	79.1	NA	413	NA	NA	NA	NA
chromium	1200	ND	ND	NA	6.26	NA	NA	NA	NA
copper	1500	ND	ND	NA	5.84	NA	NA	NA	NA
iron	--	850	185	NA	2160	NA	NA	NA	NA
lead	300	5.27	ND	NA	23.3	NA	NA	NA	NA
magnesium	--	67.2	ND	NA	175	NA	NA	NA	NA
manganese	--	8.8	ND	NA	8.08	NA	NA	NA	NA
potassium	--	ND	ND	NA	62.8	NA	NA	NA	NA
zinc	2800	17.2	ND	NA	67	NA	NA	NA	NA

Notes: Only detections are reported in this table.

J - indicates a value reported below the detection limit.

--- indicates there is no notification concentration for the specified compound.

NC - Notification Concentration for the GDNR Hazardous Site Response Program

NA - parameter not analyzed for.

ND - not detected.

FN: 4-4.WK1943-3627JAJ

**TABLE 4-5**  
**LABORATORY DETECTIONS IN SUBSURFACE SOIL**  
**BROCKWAY STANDARD**  
**HOMERVILLE, GEORGIA**

Samples collected April 1994

Compound	NC	Sample Identification			HP-9
		SG5-4S	SG6-4		
<b>TCL VOLATILES (ug/kg)</b>					
acetone	2740	NA	65 J		NA
1,1-dichloroethene	360	NA	4 J		NA
1,1-dichloroethane	30	NA	12		NA
2-butanone	790	NA	15 J		NA
trichloroethene	130	NA	3 J		NA
tetrachloroethene	180	NA	9		NA
ethylbenzene	20000	NA	2 J		NA
styrene	14000	NA	2 J		NA
xylenes	20000	NA	18		NA
cis-1,2-dichloroethene	--	NA	2 J		NA
<b>TCL SEMIVOLATILES (ug/kg)</b>					
4-methylphenol	3800	NA	550		NA
<b>TCL Pests/PCBs</b>					
Hexane (ug/kg)	--	ND	NA		NA
TPH (mg/kg)	--	89.6	NA		NA
<b>TAL METALS (mg/kg)</b>					
aluminum	--	NA	2300		NA
calcium	--	NA	591		NA
iron	--	NA	672		NA
magnesium	--	NA	83.4		NA
manganese	--	NA	8.51		NA
potassium	--	NA	82.4		NA
sodium	--	NA	932		NA
zinc	2800	NA	4.96		NA

Notes: Only detections reported in this table.

Only detections reported in this table.

J - indicates a value reported below the detection limit.

— - there is no notification concentration for this.

NC Notification Concentration for the GDNR Hazardous Site Response Program

NA parameter not analyzed for.

ND parameter not detected.

FN: 4-5.WK11934-3627UAJ

#### 4.2.3.3 Sediment

Sediment samples were collected from five locations across the Site as indicated on Figure 2. Laboratory detections are presented in Table 4-6. Georgia Hazardous Site Response Act Notification Concentrations have been used for comparison to the results obtained, in the absence of any applicable sediment threshold levels. Three of the samples were analyzed for VOCs. VSS-1 was collected from the ditch along the railroad tracks near the raw materials warehouse and reported no VOCs. VSS-2 was collected from the pond west of the lithography building, and reported three non-chlorinated VOCs below Georgia notification concentrations. VSS-4 was collected from the ditch near the railroad tracks west of the small lagoon and reported no VOCs.

VSS-3 was collected from the ditch along the railroad tracks in the southern portion of the property, and analyzed for TAL metals. Several metals were reported above background levels and above notification concentrations, including cadmium at 95.6 mg/kg, lead at 4060 mg/kg, thallium at 32.4 mg/kg, and zinc at 8970 mg/kg.

Sample VSS-4 was also analyzed for semi-volatile organics and TAL metals and reported several polynuclear aromatic hydrocarbons and metals at low levels (below their respective notification concentrations).

A sediment sample collected from the small lagoon (identified as Lagoon Sediment), was analyzed for TAL metals and reported several metals below the Georgia notification concentrations.

#### 4.2.4 Quality Assurance/Quality Control

Samples were submitted to ACL in four batches under ACL project numbers 82596, 82687, 82778, and 15860.

The laboratory batches were examined for acceptable holding times, surrogate recoveries, for contaminants present in the blank samples, for acceptable accuracy and precision.

**TABLE 4-6**  
**LABORATORY DETECTIONS IN SEDIMENT**  
**BROCKWAY STANDARD**  
**HOMERVILLE, GEORGIA**

Samples collected April 1994

Compound	NC	VSS-1	VSS-2	VSS-3	VSS-4	Lag. Sed.
<b>TCL VOLATILES (ug/kg)</b>						
acetone	2740	ND	86 J	NA	ND	NA
2-butanone	790	ND	48 J	NA	ND	NA
toluene	14400	ND	79	NA	ND	NA
<b>TCL SEMIVOLATILES (ug/kg)</b>						
fluoranthene	5000000	NA	NA	NA	70 J	NA
pyrene	5000000	NA	NA	NA	110 J	NA
chrysene	5000	NA	NA	NA	80 J	NA
benzo(b)fluoranthene	5000	NA	NA	NA	90 J	NA
benzo(k)fluoranthene	5000	NA	NA	NA	80 J	NA
<b>TAL METALS (mg/kg)</b>						
aluminum	—	NA	NA	3210	2070	2730
barium	500	NA	NA	253	10.5	22
cadmium	39	NA	NA	95.6	ND	ND
calcium	—	NA	NA	5710	572	716
chromium	1200	NA	NA	670	12.1	40.4
cobalt	25	NA	NA	5.19	ND	ND
copper	1500	NA	NA	320	ND	ND
iron	—	NA	NA	9970	901	1920
lead	300	NA	NA	4060	22.2	54.2
magnesium	—	NA	NA	1130	64.5	121
manganese	—	NA	NA	71.8	23.7	10.8
mercury	17	NA	NA	0.55	ND	ND
nickel	420	NA	NA	412	ND	20.3
potassium	—	NA	NA	54	ND	ND
selenium	36	NA	NA	17.8	ND	ND
sodium	—	NA	NA	79.8	ND	ND
thallium	10	NA	NA	32.4	ND	ND
vanadium	100	NA	NA	30.4	ND	ND
zinc	2800	NA	NA	8970	61.5	352

Notes: Only detections are reported in this table.

J - indicates a value reported below the detection limit.

-- - indicates there is no notification concentration for the specified compound.

NC - Notification Concentration for the GDNR Hazardous Site Response Program

NA - parameter not analyzed for.

ND - not detected.

FN: 4-6.WK1943-3627JAJ

The only issues noted with QA concern:

- Reduced recovery of 4-Bromofluorobenzene (71% when lower limit is 74%) for VOCs for VSS-1: this could indicate the VOCs results for this sample may be slightly higher than reported.
- Reduced recovery of Toluene-d8 (87.9% when lower limit is 88%) for MW-11: this is considered insignificant due to the acceptable recoveries of other surrogates and the deviation of only 0.01%.
- Detection of 0.02 mg/l zinc in a water blank for batch 15880. This could indicate that reported zinc levels may be lower than were reported.
- Detection of 54.4 mg/kg calcium in a soil blank for batch 15880. This could indicate that reported calcium levels may be lower than were reported.

Based on examination of the laboratory QA, as discussed above, the data is considered to be of acceptable quality to be used for this project.

## 5.0 CONCLUSIONS

### 5.1 Groundwater Flow Direction

Groundwater flow at the site is influenced by several conflicting gradients comprising

- . The general regional direction of groundwater flow towards the southeast;
- . The local topography resulting in migration toward the west-south west. This has created the on-site pond as a local discharge point; and
- . The presence of both on-site and off-site drainage, probably resulting in local groundwater mounding and a flow component to the south.

There is no overall barrier to local vertical migration of chemicals, at least to 40 ft BGS, the depth of drilling on-site. A review of the overlying materials in the MW-8 location suggests the presence of a buried river channel that would result in the non-continuous nature of shallow clays at the site.

### 5.2 Contamination

The contaminants that have been identified in the site investigations have included chlorinated solvents, NAPLs containing hydrocarbons, and elevated concentrations of some metals. Golder Associates considers that the type, the concentration, and the extent of chlorinated solvents at the site presents the most significant of the contamination issues.

#### 5.2.1 Chlorinated Solvents

The extent of contamination defined in this additional Phase II refines the initial conclusions reached from the ENVIRON Phase II which suggest that there is contamination of the groundwater with chlorinated organic volatile compounds. The previous studies had indicated uncertainty as to the vertical extent of the contamination with the deepest extent being roughly 17 feet BGS. This study has extended the known extent of contamination to at least 40 ft BGS in MW-8.

The shallow groundwater contamination appears to be bounded laterally to the north, north west, north east and east. To the north and north west, the chlorinated VOCs are

bounded by clean points at MW-12, MW-7, HP-13, HP-19, and HP-17. To the east the chlorinated VOCs are semi-quantitatively bounded by low detections in HP-12 (TCE at 6 ug/l) and HP-1 (TDCE at 28 ug/l). However, the VOC contamination may have migrated off-site to the west, south west, south and, at depth, to the south east.

Golder Associates did not observe any primary sources of the chlorinated VOCs at the site. However, from review of the analytical data, secondary sources of VOCs are evident in the subsurface including the areas around MW-3, the paint booths, the "Purolator building", and possibly the areas around MW-11 and MW-4.

11-DCE appears to be the chlorinated VOC present in greatest concentrations at the site. 11-DCE is a degradation product formed by the anaerobic biodegradation of PCE and TCE, by the hydrolysis of 111-TCA, and by the thermal decomposition of 111-TCA, as may occur in welding shops if 111-TCA is used as a degreaser. Figure 4 presents some of the degradation pathways of the chlorinated VOCs. All the chlorinated VOCs noted on Figure 4 are reported in the groundwater at the Brockway site.

Sampling through the downgradient clay layer has not been performed. However, chemical analyses of both the on-site production well and the city drinking water supply have not reported any detections of the chlorinated volatile organics.

Samples taken from the lake in February 1994 and in April 1994 both reported 11-DCE at 4 ug/l, below the method detection limit of 5 ug/l. The reported half-life of 11-DCE in surface water is 1-6 days, thereby indicating that there could be a continuing source of 11-DCE to the lake.

### 5.2.2 Non-Aqueous Phase Liquids

A few feet of LNAPL that consisted primarily of mineral spirit range hydrocarbons was encountered in MW-3. This appeared as a light straw-colored liquid that was also noted, but not analyzed, at the SG-5 and SG-6 locations.

The extent of "lava lamp" NAPL noted at SG-3 has not been delineated. The NAPL liquid and sediment was grey colored and slightly more dense than water.

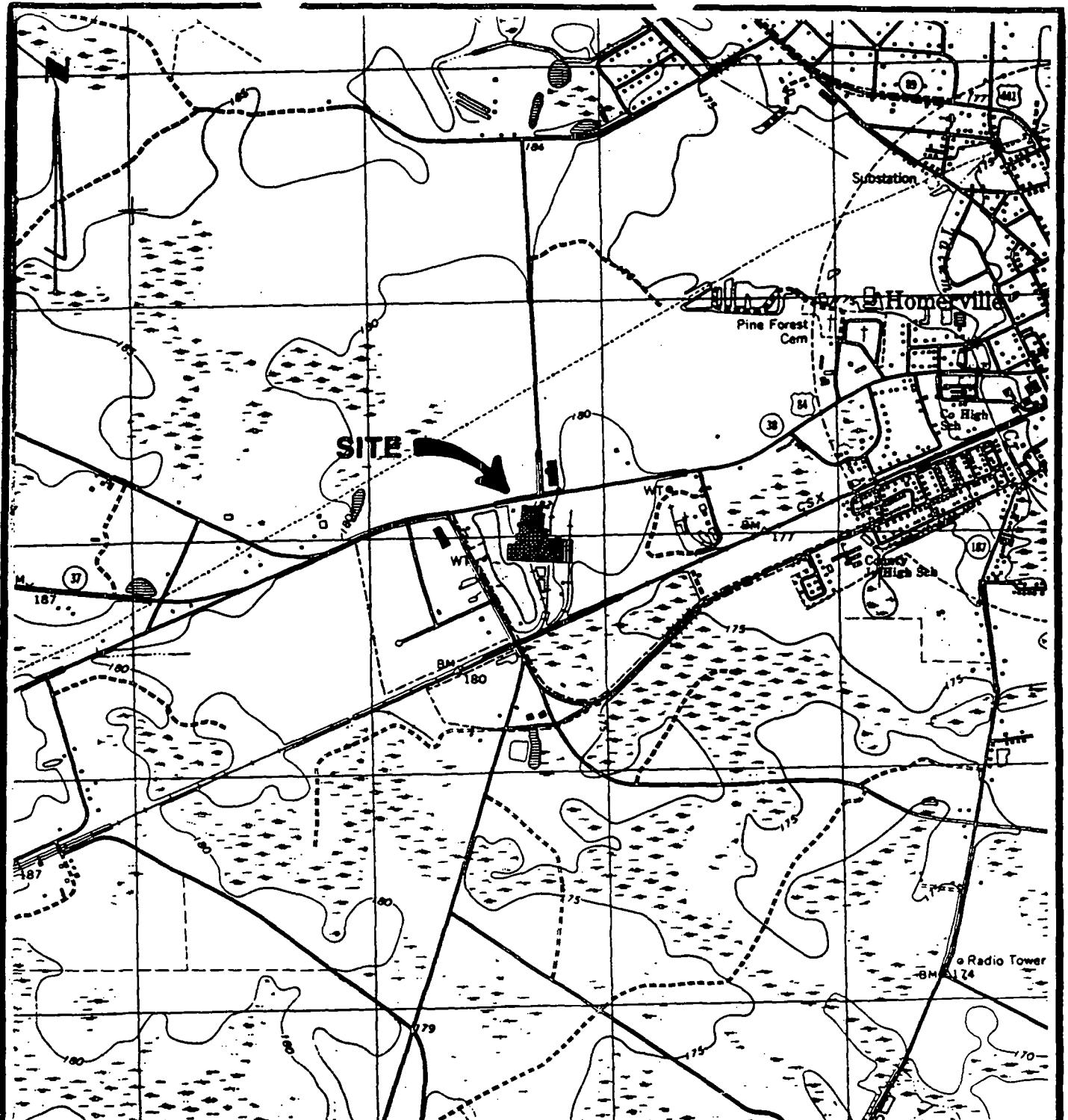
### 5.2.3 Metals

Slightly elevated concentrations of cadmium, lead, thallium, and zinc were reported in sediment sample VSS-3. Metals are not of concern in surface waters. Zinc was reported above its regulatory limit in the cooling water discharge and the lagoon. However, neither of these water bodies discharges to a natural surface water. Also, metals are generally not of concern with respect to the site, when compared with background for groundwater water and reporting standards for soils.

### 5.3 Restriction

This report has been prepared exclusively for Brockway Standard Inc. in connection with this additional Phase II investigation performed by Golder Associates. The data, information and opinions contained in this report have been developed using technical approaches and procedures consistent with the standard of care normal to this industry, and are intended for the sole use of Brockway Standard Inc. Golder Associates Inc. disclaims any and all responsibility whatsoever to any third parties who obtain, use, cite, or otherwise reference data, information, or opinions expressed or implied in this report.

EN: JGJ-KPT:jul:943-3627(ja)



**REFERENCE:**

TOPOGRAPHY TAKEN FROM THE HOMERVILLE WEST  
U.S.G.S. QUADRANGLE, GEORGIA - CLINCH CO.,  
7.5 MINUTE SERIES, PHOTOREVISED 1987.



QUADRANGLE LOCATION

SCALE IN FEET



**Golder  
Associates**

Atlanta, Georgia

TITLE

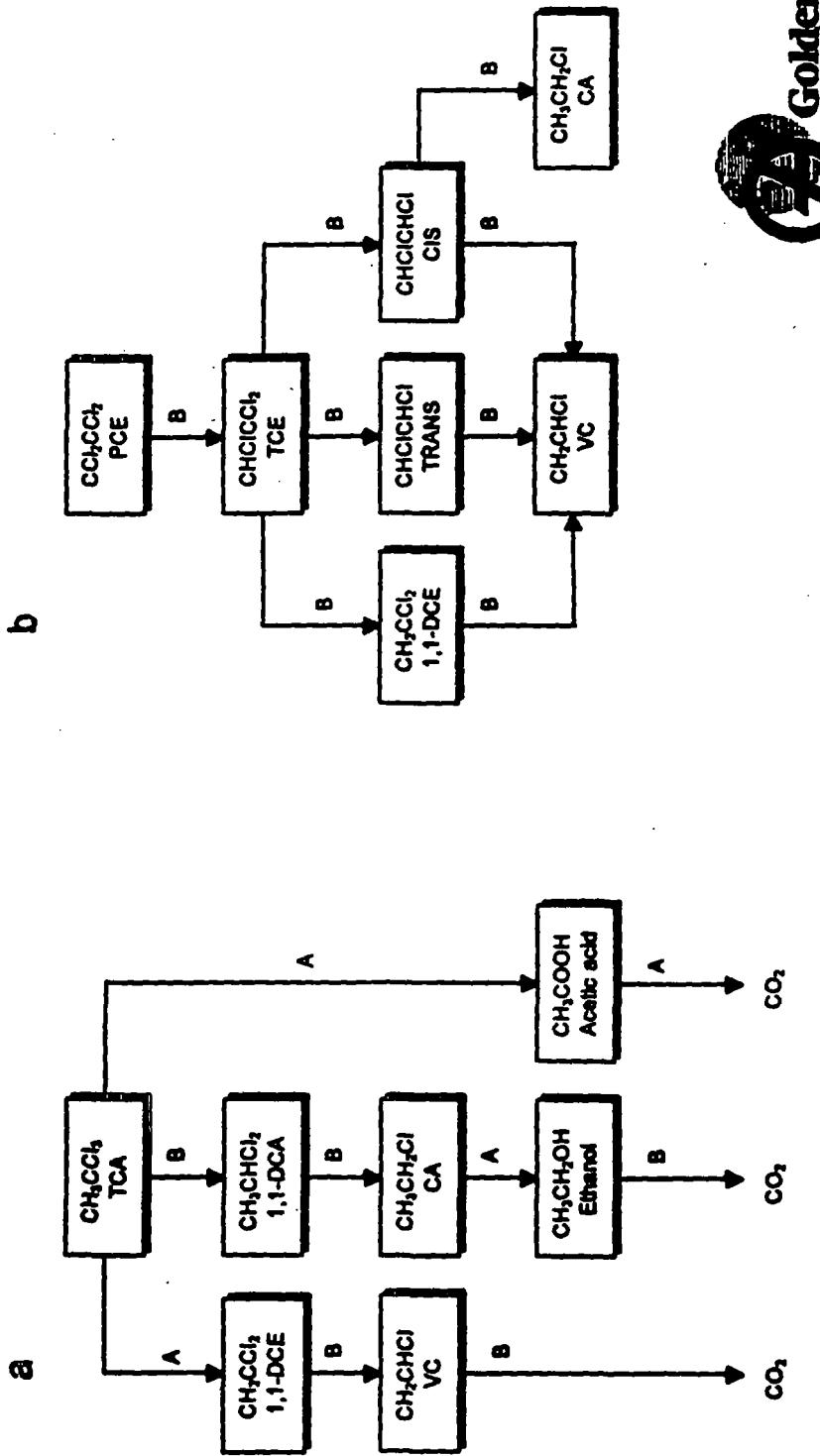
**SITE LOCATION MAP**

CLIENT/PROJECT

**BROCKWAY STANDARD, INC.  
HOMERVILLE, GEORGIA FACILITY**

DRAWN	R.C.A.	DATE	2/16/94	JOB NO.	943-3627
CHECKED	770/P	SCALE	AS SHOWN	DOC NO.	REV. NO.
REVIEWED	CD	FILE NO.	943-3627	SUBTITLE	FIGURE NO. 1

# POSSIBLE TRANSFORMATION SEQUENCES

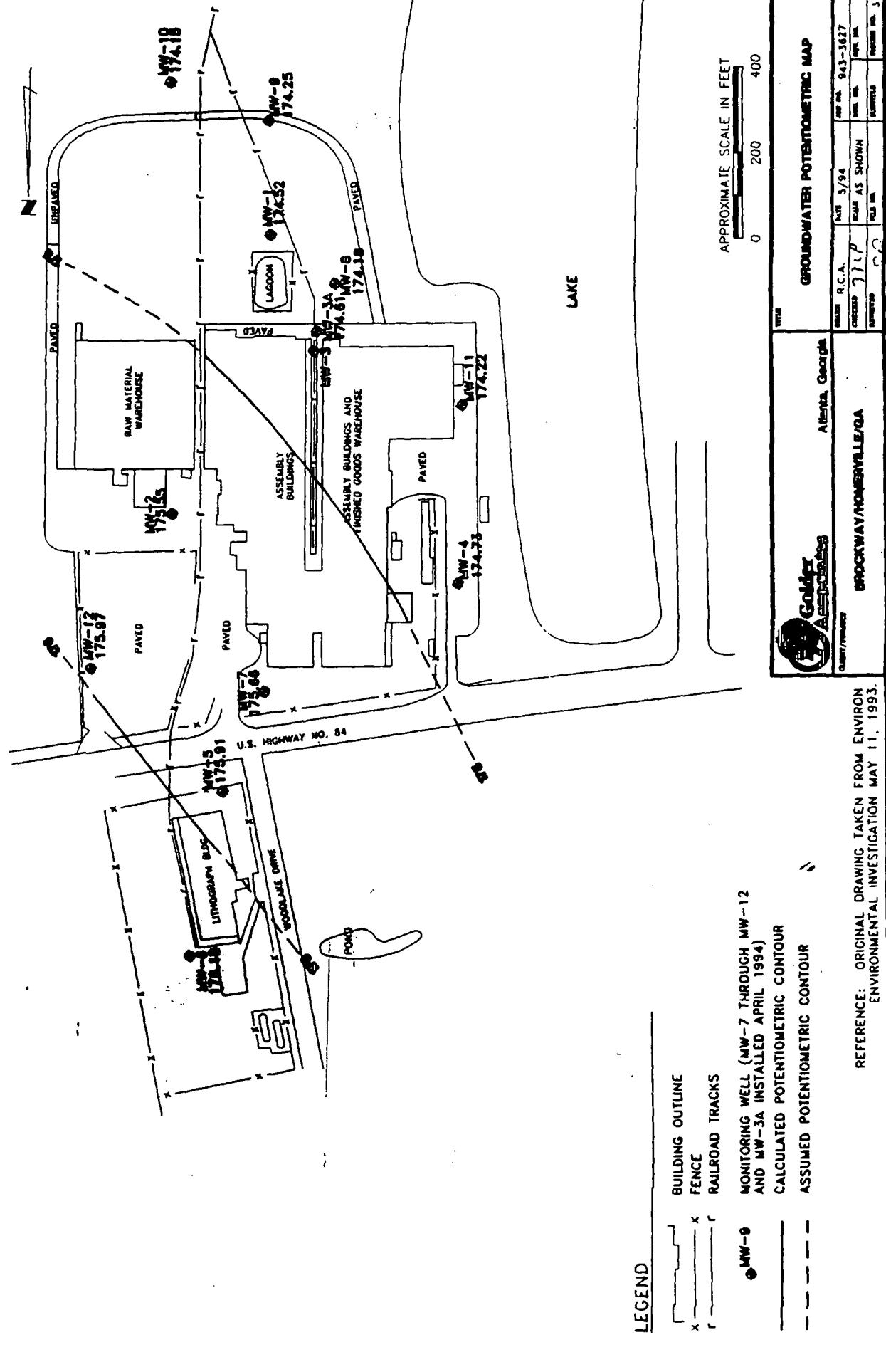


2-10-94 B157106

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FIGURE 4

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**TABLE 1**  
**Soil and Sediment Sampling Locations, Depths and Analyses**

Area	Sample Number	Depth	Analytical Parameters <sup>1</sup>
Burn Area	3212A-BA01-SB01	0.0-0.5	TPHC, Chromium, Lead, Zinc
	3212A-BA01-SB02	1.5-2.0	Solvents
	3212A-BA02-SB01	0.0-0.5	TPHC, Chromium, Lead, Zinc
	3212A-BA02-SB02	1.5-2.0	Solvents
Lagoon	3212A-LG01-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents, TCLP Semivolatiles, TCLP Metals, TCLP Volatiles, TCLP Pesticides, TCLP Herbicides
	3212A-LG02-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents, TCLP Semivolatiles, TCLP Metals, TCLP Volatiles, TCLP Pesticides, TCLP Herbicides
Railroad	3212A-MW03-SB01	3.0-4.0	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-RR01-SB01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-RR02-SB01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-RR03-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-RR04-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-RR05-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-RR06-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-RR07-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-RR08-SB01	0.0-0.5	TPHC, Chromium, Lead, Zinc
	3212A-RR08-SB02	1.5-2.0	Solvents
MW4	3212A-NMW4-SB01	0.2-0.7	TPHC, Chromium, Lead, Zinc, Solvents
MWS	3212A-NMW5-SB01	0.2-0.7	TPHC, Chromium, Lead, Zinc, Solvents
MW6 (Drum Storage)	3212A-MW06-SB01	1.5-3.5	TPHC, Chromium, Lead, Zinc, Solvents

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**TABLE 1  
Soil and Sediment Sampling Locations, Depths and Analyses**

Area	Sample Number	Depth	Analytical Parameters <sup>1</sup>
Pond	3212A-TDP1-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents
	3212A-TDP2-SS01	0.0-0.5	TPHC, Chromium, Lead, Zinc, Solvents

Notes:

<sup>1</sup> Analyses:

TPHC: Total Petroleum Hydrocarbons (EPA Method 418.1)

Solvents: Volatile Organic Chemicals (EPA Method 8240)

Chromium, Lead, Zinc: (EPA Method 6010)

TCLP: Toxicity Characteristic Leaching Procedure

TCLP Semivolatiles (EPA Method 8270)

TCLP Metals (EPA Method 6010)

TCLP Volatiles (EPA Method 8240)

TCLP Herbicides (EPA Method 8150)

TCLP Pesticides (EPA Method 8080)

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**TABLE 2  
Ground Water Sampling Locations and Analyses**

Well ID	Sample Number	Analytical Parameters <sup>1</sup>
MW1	3212A-MW01-GW01	TPHCs, Chromium, Lead, Zinc, Solvents
MW2	3212A-MW01-GW01	TPHCs, Chromium, Lead, Zinc, Solvents
MW3	3212A-MW01-GW01	TPHCs, Chromium, Lead, Zinc, Solvents
MW4	3212A-MW01-GW01	TPHCs, Chromium, Lead, Zinc, Solvents
MW5	3212A-MW01-GW01	TPHCs, Chromium, Lead, Zinc, Solvents
MW6	3212A-MW01-GW01	TPHCs, Chromium, Lead, Zinc, Solvents

Notes:

<sup>1</sup> Analyses:

TPHC: Total Petroleum Hydrocarbons (EPA Method 418.1)  
Solvents: Volatile Organic Chemicals (EPA Method 8240)  
Chromium, Lead: (EPA 7000 Series Method)  
Zinc: (EPA Method 6010)

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**TABLE 3**  
**Summary of Analytical Results for Soils and Sediments (ppm)**

ENVIRON Sample ID	BA01-SB01 0.0-0.5	BA01-SB02 1.5-2.0	BA02-SB01 0.0-0.5	BA02-SB02 1.5-2.0	LG01-SS01 0.0-0.5	LG02-SS01 0.0-0.5
Depth (feet)						
Petroleum Hydrocarbons	26.2	—	37.7	—	470	14,700
<b>Volatile Organic Compounds</b>						
Chloroethane	—	<0.012	—	<0.012	<0.023	<0.029
1,1-Dichloroethane	—	<0.0058	—	<0.0055	<0.011	<0.014
1,2-Trans-dichloroethylene	—	<0.002	—	<0.0019	<0.0036	<0.0047
Methylene chloride	—	<0.0035	—	<0.0033	<0.0064	<0.0082
Methyl ethyl ketone	—	<0.012	—	<0.012	<0.023	<0.029
Methyl-iso-butyli ketone	—	<0.012	—	<0.012	<0.023	<0.029
Tetrachloroethylene	—	<0.0051	—	<0.0048	<0.0093	<0.012
1,1,1-Trichloroethane	—	<0.0047	—	<0.0045	<0.0086	<0.011
1,1,2-Trichloroethane	—	<0.0062	—	<0.0059	<0.011	<0.015
Trichloroethylene	—	<0.0023	—	<0.0022	<0.0043	<0.0056
Trichlorofluoromethane	—	<0.0012	—	0.017	<0.023	<0.029
Toluene	—	<0.0074	—	<0.0071	<0.014	0.0061
Xylene(s)	—	<0.012	—	<0.012	<0.023	<0.029

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**TABLE 3**  
**Summary of Analytical Results for Soils and Sediments (ppm)**

ENVIRON Sample ID Depth (feet)	BA01-SB01 0.0-0.5	BA01-SB02 1.5-2.0	BA02-SB01 0.0-0.5	BA02-SB02 1.5-2.0	LG01-SS01 0.0-0.5	LG02-SS01 0.0-0.5
<b>Metals</b>						
Chromium	3.7	-	3.9	-	110	5,110
Lead	9.7	-	10	-	40	410
Zinc	2.3B	-	2.5B	-	550	55,700
<b>TCLP Parameters</b>						
TCLP Metals	-	-	-	-	ND	ND
Barium	-	-	-	-	0.18	ND
TCLP Semivolatiles	-	-	-	-	ND	ND
TCLP Volatiles	-	-	-	-	ND	ND
TCLP Pesticides	-	-	-	-	ND	ND
TCLP Herbicides	-	-	-	-	ND	ND

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ENVIRON

**TABLE 3**  
**Summary of Analytical Results for Soils and Sediments (ppm)**

ENVIRON Sample ID Depth (feet)	MW03-SB01 3.0-4.0	MW06-SB01 1.5-3.5	NMW4-SB01 0.2-0.7	NMW5-SB01 0.2-0.7	RR01-SB01 0.0-0.5	RR02-SB01 0.0-0.5
	Petroleum Hydrocarbons	39.4	22.3	114	814	20,000
<b>Volatile Organic Compounds</b>						
Chloroethane	<b>0.029</b>	<0.011	<0.011	<0.011	<0.011	<3.0
1,1-Dichloroethane	<b>0.046</b>	<0.0052	<0.0051	<0.0053	<0.0052	<1.4
1,2-Trans-dichloroethylene	<0.0018	<0.0018	0.0070	<0.0018	<0.0018	<0.48
Methylene chloride	<b>0.0073</b>	(0.010)	<0.0030	<0.0032	<0.0031	<3.0
Methyl ethyl ketone	<b>0.0089J</b>	<0.011	<0.011	<0.011	<0.011	64.1
Methyl-iso-butyl ketone	<0.011	<0.011	<0.011	<0.011	<0.011	<3.0
Tetrachloroethylene	<0.0047	<0.0045	<0.0045	<0.0047	<0.0045	<1.2
1,1,1-Trichloroethane	<b>0.015</b>	<0.0042	<0.0041	<0.0043	0.014	1.78
1,1,2-Trichloroethane	<0.0057	<0.0055	<0.0054	<0.0057	<0.0055	<1.5
Trichloroethylene	<0.0022	<0.0021	<0.0021	<0.0022	<0.0021	<0.57
Trichlorofluoromethane	<0.011	<0.011	<0.011	<0.011	<0.011	<3.0
Toluene	<0.0068	<0.0068	<0.0065	<0.0068	0.0056J	38.9
Xylene(s)	<0.011	0.011	<0.011	<0.011	<0.011	4.72J

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**TABLE 3**  
Summary of Analytical Results for Soils and Sediments (ppm)

ENVIRON Sample ID Depth (feet)	MW06-SB01 3.6-4.5	MW06-SB01 1.5-3.5	NMW4-SB01 0.2-0.7	NMW5-SB01 0.2-0.7	RR01-SB01 0.0-0.5	RR02-SB01 0.0-0.5
	Metals					
Chromium	5.70	2.20	1.70	11	45	295
Lead	6.30B	2.0B	8.90	35	1,380	3,120
Zinc	2.1J	4.60	9.40	288	488	663

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**TABLE 3**  
**Summary of Analytical Results for Soils and Sediments (ppm)**

ENVIRON Sample ID Depth (feet)	RR03-SS01 0.0-0.5		RR04-SS01 0.0-0.5		RR05-SS01 0.0-0.5		RR06-SS01 0.0-0.5		RR07-SS01 0.0-0.5		RR08-SS01 0.0-0.5	
	Petroleum Hydrocarbons	32.3	1,210	1,100	10,300	77.9	77.9	77.9	77.9	77.9	77.9	45.5
<b>Volatile Organic Compounds</b>												
Chloroethane <sup>c</sup>	<0.012	<0.012	<0.012	<0.012	2.72	0.109	—	—	—	—	—	—
1,1-Dichloroethane	<0.0055	<0.0055	<0.0055	<0.0055	18.1	<0.0075	—	—	—	—	—	—
1,2-Trans-dichloroethylene	<0.0019	<0.0019	<0.0019	<0.0019	14.2	<0.0025	—	—	—	—	—	—
Methylene chloride	<0.0033	<0.0033	<0.0033	<0.0033	<0.34	<0.0044	—	—	—	—	—	—
Methyl ethyl ketone	<0.012	<0.012	<0.012	<0.012	<1.2	<0.016	—	—	—	—	—	—
Methyl-iso-butyl ketone	<0.012	<0.014	<0.012	<0.012	<1.2	<0.016	—	—	—	—	—	—
Tetrachloroethylene	<0.0048	<0.0048	<0.0048	<0.0048	( 0.48 )	<0.0065	—	—	—	—	—	—
1,1,1-Trichloroethane	<0.0045	<0.0044	<0.0045	<0.0045	21.1	<0.006	—	—	—	—	—	—
1,1,2-Trichloroethane	<0.0059	<0.0058	<0.0059	<0.0059	<0.61	<0.0079	—	—	—	—	—	—
Trichloroethylene	<0.0022	<0.0022	<0.0022	<0.0022	1.58	<0.003	—	—	—	—	—	—
Trichlorofluoromethane	<0.012	<0.012	<0.012	<0.012	<1.2	<0.016	—	—	—	—	—	—
Toluene	<0.0071	<0.007	<0.0071	<0.0071	<0.73	<0.0095	—	—	—	—	—	—
Xylene(s)	<0.012	0.0072	<0.012	<0.012	<1.2	0.024J	—	—	—	—	—	—

**TABLE 3**  
**Summary of Analytical Results for Soils and Sediments (ppm)**

ENVIRON Sample ID Depth (feet)	RR03-SS01 0.0-0.5	RR04-SS01 0.0-0.5	RR05-SS01 0.0-0.5	RR06-SS01 0.0-0.5	RR07-SS01 0.0-0.5	RR08-SS01 0.0-0.5
	<b>Metals</b>					
Chromium	7.5	44	35	423	22	53
Lead	15	290	180	3,300	83	420
Zinc	38	210	377	4,930	392J	110J

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**TABLE 3**  
**Summary of Analytical Results for Soils and Sediments (ppm)**

ENVIRON Sample ID	Depth (feet)	RR08-SB02			RR09-SS01			TDP1-SS01			TDP2-SS01		
		1.5-2.0	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	
<b>Petroleum Hydrocarbons</b>													
Chloroethane		<0.012		<0.024		<0.018		<0.012		<0.012		<0.012	
1,1-Dichloroethane		<0.0035		<0.011		<0.0082		<0.0057		<0.0057		<0.0057	
1,2-Trans-dichloroethylene		<0.0019		<0.0039		<0.0028		<0.0022		<0.0022		<0.0022	
Ethylbenzene		<0.0085		0.030		<0.013		<0.0088		<0.0088		<0.0088	
Methylene chloride		<0.0033		<0.0068		<0.0049		<0.0052		<0.0052		<0.0052	
Methyl ethyl ketone		0.015		<0.024		<0.018		<0.012		<0.012		<0.012	
Methyl-isobutyl ketone		<0.012		<0.024		<0.018		<0.012		<0.012		<0.012	
Tetrachloroethylene		<0.0048		<0.010		<0.0072		<0.0055		<0.0055		<0.0055	
1,1,1-Trichloroethane		<0.0045		<0.0093		<0.0067		<0.0046		<0.0046		<0.0046	
1,1,2-Trichlorethane		<0.0059		<0.012		<0.0088		<0.0061		<0.0061		<0.0061	
Trichloroethylene		<0.0022		<0.0046		<0.0033		<0.0023		<0.0023		<0.0023	
Trichlorofluoromethane		<0.012		0.145		<0.018		<0.012		<0.012		<0.012	
Toluene		<0.0071		3.81		<0.011		<0.0073		<0.0073		<0.0073	
Xylene(s)		<0.012		0.33		<0.018		<0.012		<0.012		<0.012	

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**TABLE 3**  
**Summary of Analytical Results for Soils and Sediments (ppm)**

ENVIRON Sample ID Depth (feet)	BROS-SB02 1.5-2.0	RR09-SS01 0.0-0.5		TDP1-SS01 0.0-0.5	TDP2-SS01 0.0-0.5
		Metals			
Chromium	—	339	1.60	1.60	1.90
Lead	—	1,430	2.60B	2.60B	3.70B
Zinc	—	2,880J	3.70	3.70	5.50

ppm Parts per million or milligrams per kilogram (mg/kg).

ND Not detected.

B Chemical was detected in an associated blank at a concentration greater than one fifth of the sample concentration.

J Quantity is an estimate.

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TABLE 4  
Summary of Analytical Results for Ground Water (ppb)

ENVIRON Sample ID	MW01-GW01	MW02-GW01	MW03-GW01	MW04-GW01	MW05-GW01	MW06-GW01
Total Petroleum Hydrocarbons	<1,000	1,100	<1,000	<1,000	<1,000	<1,000
				Volatile Organic Compounds		
Chloroethane	<100	<10	1,010	74.1	<10	<10
1,1-Dichloroethane	371	27.8	2,890	562	<4.7	<4.7
1,1-Dichloroethylene	1,530	10.9	5,620	431	1.51J	<2.8
1,2-Trans-dichloroethylene	363	48.4	1,400	57.4	<1.6	<1.6
Ethylbenzene	<72	<7.2	<360	15.3J	<7.2	<7.2
Methylene chloride	<28	<2.8	<140	5.41J	<2.8	<2.8
Methyl ethyl ketone	<100	<10	<500	<50	<10	<10
Methyl-iso-butyl ketone	<100	<10	<500	<50	<10	<10
1,1,1-Trichloroethane	66.6	<3.8	1,050	741	<3.8	<3.8
1,1,2-Trichloroethane	<50	<5.0	<250	<25	<5.0	<5.0
Trichloroethylene	127	<1.9	637	<9.5	<1.9	<1.9
Toluene	7.60J	<6.0	185	<30	<6.0	<6.0
Vinyl chloride	599	55.5	8,400	168	<10	<10
Xylene(s)	<100	<10	<500	21.9J	<10	<10

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**TABLE 4**  
Summary of Analytical Results for Ground Water (ppb)

ENVIRON Sample ID	MW01-GW01	MW02-GW01	MW03-GW01	MW04-GW01	MW05-GW01	MW06-GW01
	Metals					
Chromium	1.9B	0.60B	5.70	2.20B	23	22
Lead	2.8J	7.90	4.9J	6.0	8.8	1.9
Zinc	20	26	16J	9.3B	51	26

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ENVIRON

**TABLE 4**  
**Summary of Analytical Results for Ground Water (ppb)**

<b>ENVIRON Sample ID</b>	<b>0415-WB01 (Wash Blank)</b>		<b>TB-041593 (Trip Blank)</b>
	<b>Petroleum Hydrocarbons</b>	<b>Volatile Organic Compounds</b>	
Chloroethane	<10	<10	<10
1,1-Dichloroethane	<4.7	<4.2	<4.2
1,2-Trans-dichloroethylene	<2.8	<2.8	<2.8
Methyl ethyl ketone	<10	<10	<10
Methyl- <i>is</i> -butyl ketone	<10	<10	<10
1,1,1-Trichloroethane	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	<5.0	<5.0	<5.0
Trichloroethylene	<1.9	<1.9	<1.9
Toluene	<6.0	<6.0	<6.0
Vinyl chloride	<10	<10	<10
Xylene(s)	<10	<10	<10

TABLE 4  
Summary of Analytical Results for Ground Water (ppb)

ENVIRON Sample ID	0415-WB01	TB-041593
	(Wash Blank)	(Trip Blank)
Metals		
Chromium	1.1	-
Lead	2.6	-
Zinc	17	-

ppb Parts per billion or micrograms per liter ( $\mu\text{g/L}$ ).

B Chemical was detected in an associated blank at a concentration greater than one fifth of the sample concentration.  
J Quantity is an estimate.

**PRIVILEGED AND CONFIDENTIAL  
ATTORNEY WORK PRODUCT**

**APPENDIX A**

**LITHOLOGIC LOGS FOR MONITORING WELLS**

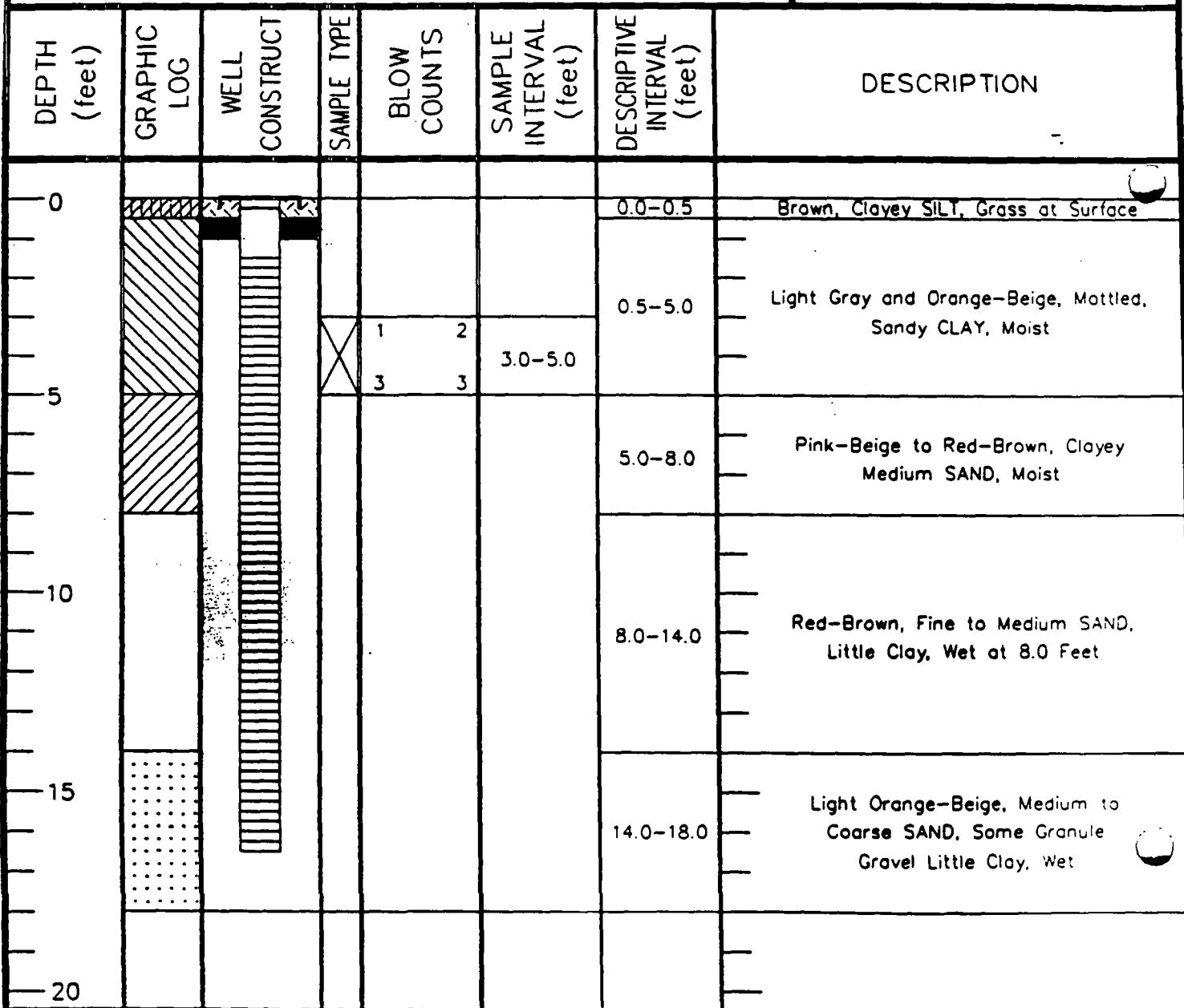
BORING/WELL # MW1  
DATE: April 14, 1993  
LOGGED BY: Clement Ockay  
DRILLING CO.: Layne Environmental Services  
DRILLER: Vance Biehl  
RIG: CME-55  
METHOD: Hollow-Stem Auger  
BORING DIA.: 10.5 Inches  
BORING DEPTH: 18.0 Feet  
DEPTH TO WATER: 2.5 Feet

WELL CASING  
LENGTH: 1.0 Feet  
DIA.: 4 Inches  
TYPE: Schedule 40 PVC

WELL SCREEN  
LENGTH: 15 Feet  
DIA.: 4 Inches  
SLOT SIZE: No. 10

WELL DEVELOPMENT  
TIME: 30 Minutes  
METHOD: Centrifugal Pump  
EST. YIELD: 8gpm

ENVIRON  
BORING/WELL LOG  
PROJECT: Brockway Standard  
Homerville, Georgia  
CASE #: 01-3212C  
COMMENTS:



BORING/WELL# MW2  
DATE: April 14, 1993  
LOGGED BY: Clement Ockay  
DRILLING CO.: Layne Environmental Services  
DRILLER: Vance Biehl  
RIG: CME-55  
METHOD: Hollow-Stem Auger  
BORING DIA.: 10.5 Inches  
BORING DEPTH: 20.0 Feet  
DEPTH TO WATER: 5.3 Feet

WELL CASING  
LENGTH: 4.5 Feet  
DIA.: 4 Inches  
TYPE: Schedule 40 PVC

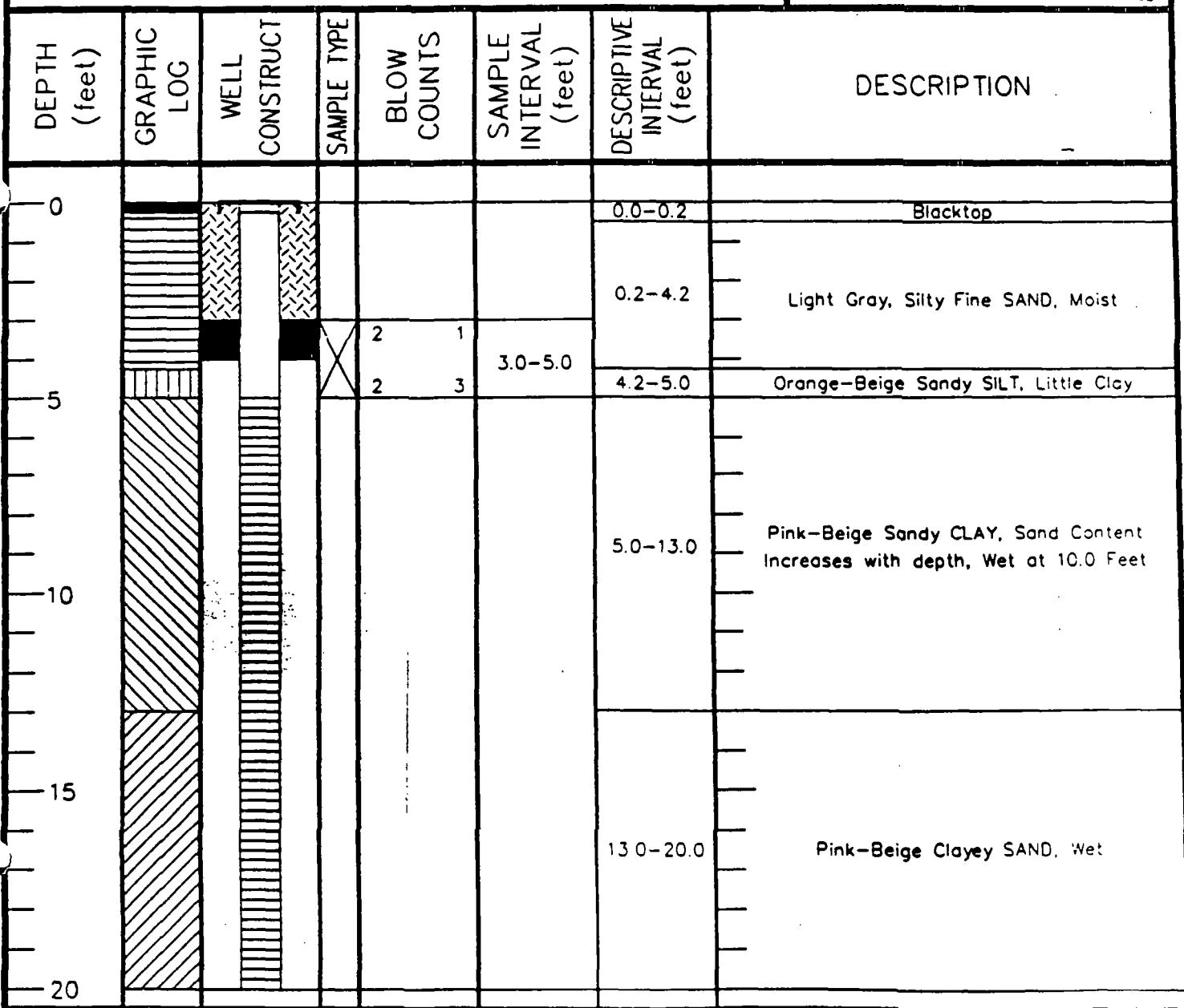
WELL SCREEN  
LENGTH: 15 Feet  
DIA.: 4 Inches  
SLOT SIZE: No. 10

WELL DEVELOPMENT  
TIME: 30 Minutes  
METHOD: Centrifigal Pump  
EST. YIELD: 9gpm

ENVIRON  
BORING/WELL LOG  
PROJECT: Brockway Standard  
Homerville, Georgia  
CASE # 01-3212C

COMMENTS:

02



BORING/WELL # MW3  
DATE: April 15, 1993  
LOGGED BY: Clement Ockay  
DRILLING CO.: Layne Environmental Services  
DRILLER: Vance Biehl  
RIG: CME-55  
METHOD: Hollow-Stem Auger  
BORING DIA.: 10.5 Inches  
BORING DEPTH: 18.0 Feet  
DEPTH TO WATER: 4.0 Feet

WELL CASING  
LENGTH: 1.5 Feet  
DIA.: 4 Inches  
TYPE: Schedule 40 PVC

WELL SCREEN  
LENGTH: 15 Feet  
DIA.: 4 Inches  
SLOT SIZE: No. 10

WELL DEVELOPMENT  
TIME: 30 Minutes  
METHOD: Centrifugal Pump  
EST. YIELD: 7gpm

ENVIRON  
BORING/WELL LOG  
PROJECT: Brockway Standard  
Homerville, Georgia  
CASE #: 01-3212C

COMMENTS:

- Soil sample 3212A-MW03-SB01 Collected from split spoon and analyzed for total petroleum hydrocarbons, volatile organics and chromium, lead and zinc

03

DEPTH (feet)	GRAPHIC LOG	WELL CONSTRUCT	SAMPLE TYPE	BLOW COUNTS	SAMPLE INTERVAL (feet)	DESCRIPTIVE INTERVAL (feet)	DESCRIPTION
0						0.0-3.0	Dark Gray, Pebble GRAVEL, Angular (Railroad Ballast), Some Medium to Fine Sand, Solvent Odor
5			X	5 4 2 2	3.0-5.0	3.0-4.2	Light Gray and Beige, Mottled, Silty Medium SAND, Solvent Odor
10						4.2-18.0	Gray, Medium SAND, Some Clay, Little Granular Gravel at 9.0 to 17.0 Feet, Wet at 7 Feet, Solvent Odor
15							
20							

BORING/WELL# MW4DATE: April 14, 1993LOGGED BY: Clement OckayDRILLING CO.: Layne Environmental ServicesDRILLER: Vance BiehlRIG: CME-55METHOD: Hollow-Stem AugerBORING DIA.: 10.5 InchesBORING DEPTH: 18.0 FeetDEPTH TO WATER: 2.7 Feet

**WELL CASING**  
 LENGTH: 2.5 Feet  
 DIA.: 4 Inches  
 TYPE: Schedule 40 PVC

**WELL SCREEN**  
 LENGTH: 15 Feet  
 DIA.: 4 Inches  
 SLOT SIZE: No. 10

**WELL DEVELOPMENT**  
 TIME: 30 Minutes  
 METHOD: Centrifigal Pump  
 EST. YIELD: 7 gpm

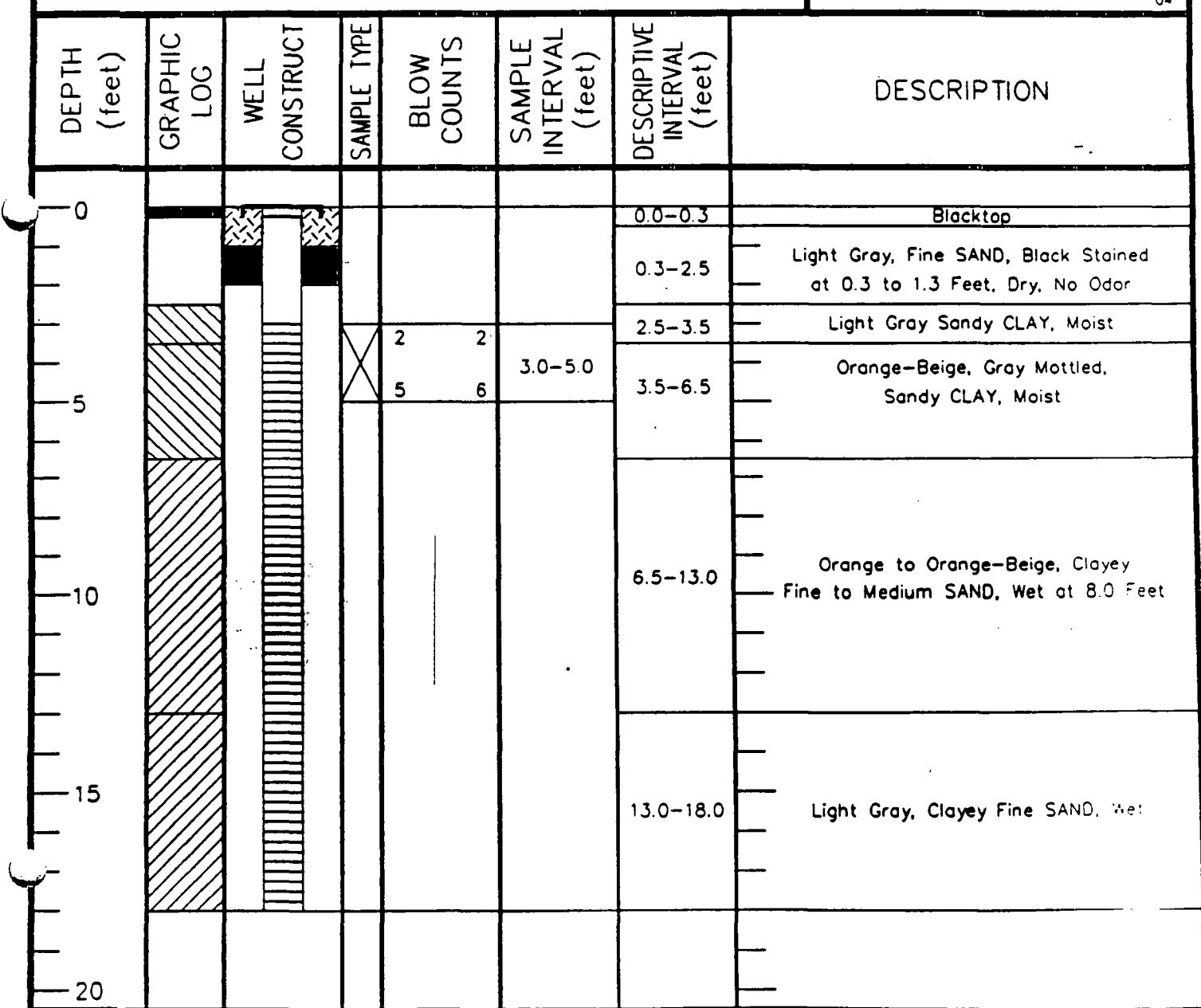
# ENVIRON

## BORING/WELL LOG

PROJECT: Brockway Standard  
Homerville, Georgia  
 CASE #: 01-3212C

COMMENTS:

04



BORINg/WELL # MWSDATE: April 14, 1993LOGGED BY: Clement OckayDRILLING CO.: Loyne Environmental ServicesDRILLER: Vance BiehlRIG: CME-55METHOD: Hollow-Stem AugerBORING DIA.: 10.5 InchesBORING DEPTH: 18.0 FeetDEPTH TO WATER: 3.0 Feet

## WELL CASING

LENGTH: 1.5 FeetDIA.: 4 InchesTYPE: Schedule 40 PVC

## WELL SCREEN

LENGTH: 15 FeetDIA.: 4 InchesSLOT SIZE: No. 10

## WELL DEVELOPMENT

TIME: 30 MinutesMETHOD: Centrifugal PumpEST. YIELD: 8gpmENVIRON  
BORING/WELL LOGPROJECT: Brockway Standard

Homerville, Georgia

CASE #: 01-3212C

COMMENTS:

05

DEPTH (feet)	GRAPHIC LOG	WELL CONSTRUCT	SAMPLE TYPE	BLOW COUNTS	SAMPLE INTERVAL (feet)	DESCRIPTIVE INTERVAL (feet)	DESCRIPTION
0						0.0-0.2	Blacktop
		X				0.2-2.0	Yellow-Beige, Medium SAND, Black Stained
						0.2-0.8 Feet, Dry, No Odor	
						2.0-3.5	Beige, Clayey Medium SAND, Moist
5				2 2	3.0-5.0		
				2 3			
						3.5-11.0	Beige to Pink Beige, Sandy CLAY, Moist
10							
15						11.0-12.5	Light Gray Sandy CLAY, Moist
20						12.5-18.0	Light Gray to Yellow, Medium SAND, Little Clay, Wet at 12.5 Feet

BORING/WELL # MW6  
DATE: April 15, 1993  
LOGGED BY: Clement Ockay  
DRILLING CO.: Layne Environmental Services  
DRILLER: Vance Biehl  
RIG: CME-55  
METHOD: Hollow-Stem Auger  
BORING DIA.: 10.5 Inches  
BORING DEPTH: 18.0 Feet  
DEPTH TO WATER: 4.0 Feet

WELL CASING  
LENGTH: 4.5 Feet  
DIA.: 4 Inches  
TYPE: Schedule 40 PVC

WELL SCREEN  
LENGTH: 15 Feet  
DIA.: 4 Inches  
SLOT SIZE: No. 10

WELL DEVELOPMENT  
TIME: 20 Minutes  
METHOD: Centrifugal Pump  
EST. YIELD: 7gpm

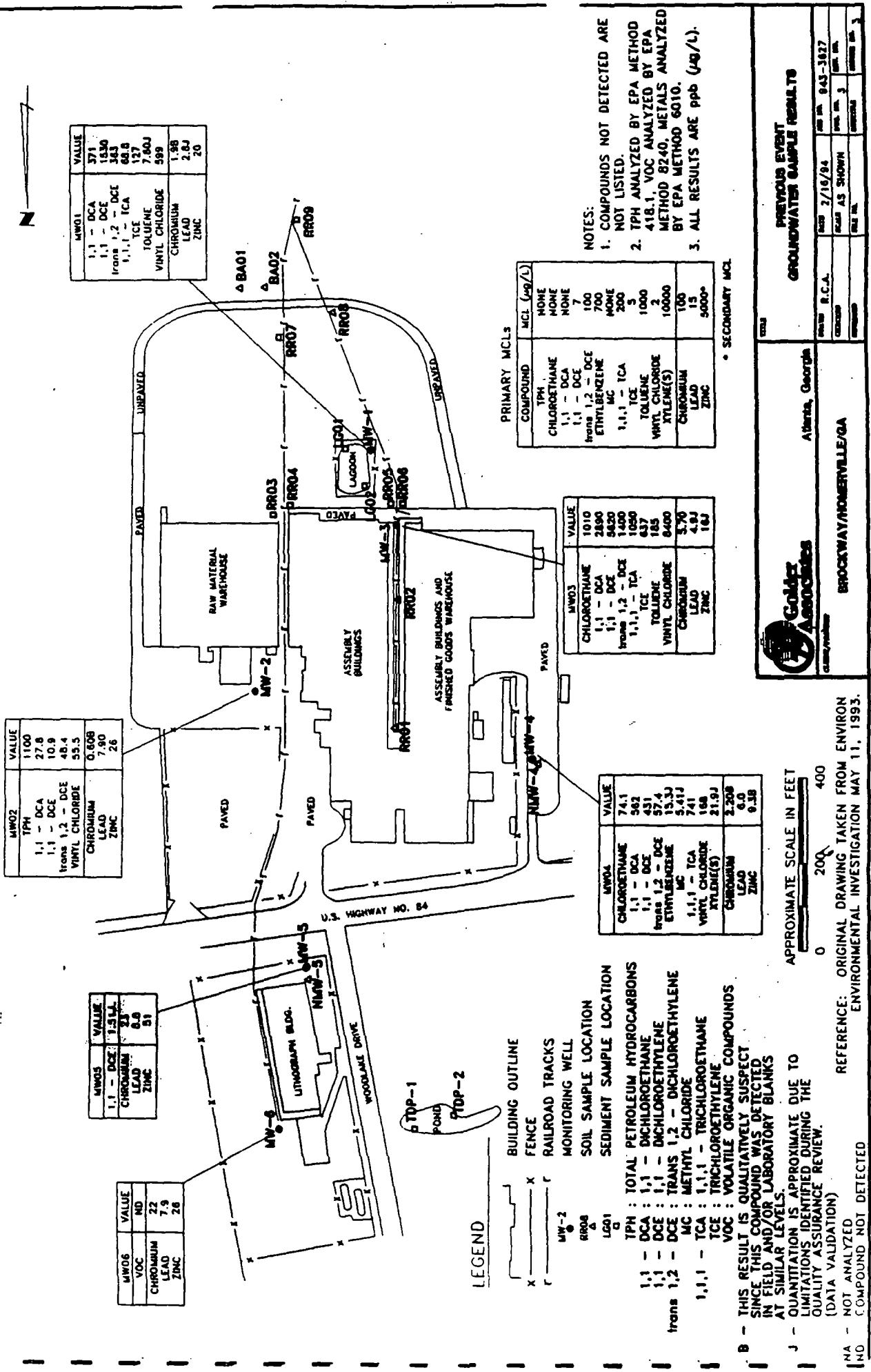
ENVIRON  
BORING/WELL LOG  
PROJECT: Brockway Standard  
Homerville, Georgia  
CASE #: 01-3212C

COMMENTS:

- Soil sample 3212A-MW06-SB01 Collected from splitspoon and analyzed for total petroleum hydrocarbons, volatile organics and chromium, lead and zinc.

06

DEPTH (feet)	GRAPHIC LOG	WELL CONSTRUCT	SAMPLE TYPE	BLOW COUNTS	SAMPLE INTERVAL (feet)	DESCRIPTIVE INTERVAL (feet)	DESCRIPTION
0						0.0-4.5	Beige to Yellow-Beige, Fine SAND Brown at 1.5-3.0 feet with Slight Chemical Odor, Moist
5						4.5-8.0	Yellow-Beige, Clayey SAND, Moist
10						8.0-12.0	Beige, Sandy CLAY, Moist
15						12.0-18.0	Beige, Clayey SAND, Wet at 12.0 Feet
20							



B - THIS RESULT IS QUANTITATIVELY SUSPECT SINCE THIS COMPOUND WAS DETECTED IN FIELD AND/OR LABORATORY BLANKS AT SIMILAR LEVELS.

J - QUANTITATION IS APPROXIMATE DUE TO LIMITATIONS IDENTIFIED DURING THE QUALITY ASSURANCE REVIEW. (DATA VALIDATION)

**RESULTS**

Sample ID : MW06

TPH	SB01	SD01
22.3	TPH MC XYLENE(S) CHROMIUM LEAD ZINC	20000 0.014 0.0058J 45 1360 488
0.010		
0.011		
2.70		
2.08		
4.60		

Sample ID : MW05

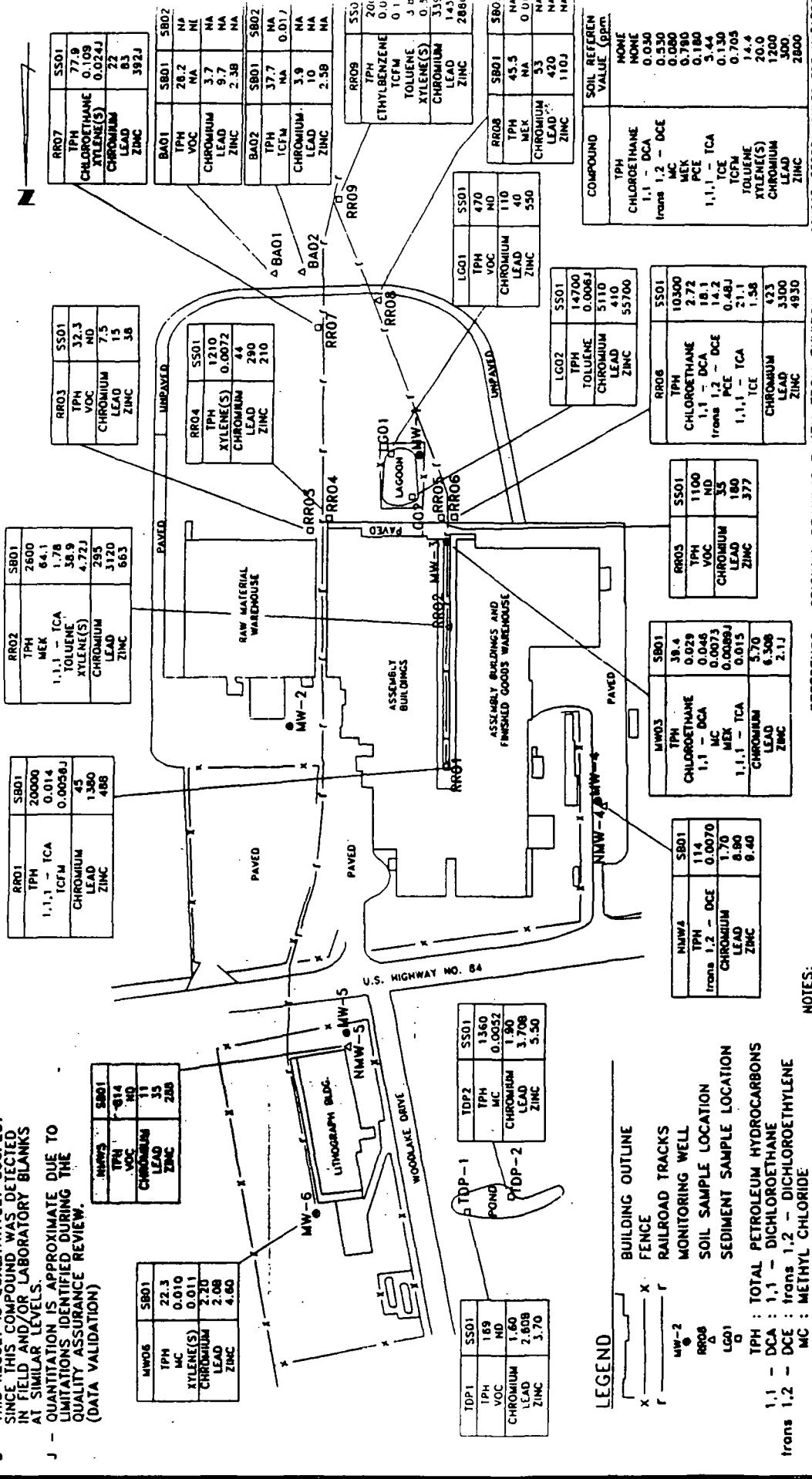
TPH	SD01	SD02
1360	TPH MC CHROMIUM LEAD ZINC	2600 64.1 1.1,1 - TCA 0.0072 0.00073 0.0009J 0.015 0.508
0.00312		
1.90		
3.708		
5.50		

Sample ID : MW04

TPH	SD01	SD02
114	TPH MC CHROMIUM LEAD ZINC	20000 0.0070 0.00073 0.0009J 0.015 0.508
0.00070		
1.70		
6.80		
9.40		

Sample ID : MW03

TPH	SD01	SD02
169	TPH VOC CHROMIUM LEAD ZINC	20000 0.014 1.60 2.608 3.70
ND		
ND		
ND		



**LEGEND**

X - FENCE  
F - RAILROAD TRACKS  
MW - MONITORING WELL  
LG - SOIL SAMPLE LOCATION  
SD - SEDIMENT SAMPLE LOCATION

TPH : TOTAL PETROLEUM HYDROCARBONS

1,1,1 - DCA : 1,1,1 - DICHLOROETHANE

1,1,2 - DCE : 1,1,2 - DICHLOROETHYLENE

MC : METHYL CHLORIDE

1,1,1 - TCA : 1,1,1 - TRICHLOROETHANE

TCFM : TRICHLOROFLUOROMETHANE

VOC : VOLATILE ORGANIC COMPOUNDS

PCE : TETRACHLOROETHYLENE

MEK : METHYL ETHYL KETONE

NA - NOT ANALYZED

ND - COMPOUND NOT DETECTED

NOTES:

- TPH ANALYZED BY EPA METHOD 418.1, VOC ANALYZED BY EPA METHOD 8240. METALS ANALYZED BY EPA METHOD 6010.
- ALL RESULTS ARE IN ppm (mg/kg).

APPROXIMATE SCALE IN FEET  
0 200 400

SOURCE: GEORGIA RULES FOR HAZARDOUS SITE RESPONSE, GAC 381-3-1  
REV. DEC. 15, 1993.



PREVIOUS EVENT

SOIL AND SEDIMENT SAMPLE RESULTS

Sample ID	Location	Method	Result	Unit
RR01	RR01	R.C.A.	2/16/94	PPM
RR02	RR02	R.C.A.	2/16/94	PPM
RR03	RR03	R.C.A.	2/16/94	PPM

Sample ID	Location	Method	Result	Unit
RR04	RR04	R.C.A.	2/16/94	PPM
RR05	RR05	R.C.A.	2/16/94	PPM
RR06	RR06	R.C.A.	2/16/94	PPM
RR07	RR07	R.C.A.	2/16/94	PPM

Sample ID	Location	Method	Result	Unit
RR08	RR08	R.C.A.	2/16/94	PPM
RR09	RR09	R.C.A.	2/16/94	PPM
RR10	RR10	R.C.A.	2/16/94	PPM

**APPENDIX**

**NET FORING LOGS AND**

**Golder Associates**  
**Field Boring Log**

DEPTH HOLE	60'	JOB NO.	943-3627	PROJECT	KIE / Phase II / GA	BORING NO.	MW-3
DEPTH SOIL DRILL	26'	SA MSP.	FBI/80H	DRILLING METHOD	HSA 4 1/4" 10	SHFT	1 OF 1
DEPTH ROCK CORE	-	WEATHER	SUNNY	DRILLING COMPANY	ENVIRONMENTAL EXPLOR	SURFACE ELEV.	~102
NO. DIST. SA	13	HR. SA	8	TEMP.	78°F	DRILL RIG	Mobile P. B-57
DEPTH WL.	= 3'	HR. PROB.	-	WT. SAMPLER HAMMER	140#	DRILLER	D. Nalle
TIME WL.	-	HR. DELAYED	-	WT. CAVING HAMMER	-	STARTED	1430, 4/11/94
				DROP	30"	COMPLETED	1830, 4/11/94

SAMPLE TYPES		ABBREVIATIONS				SOIL DESCRIPTION - RANGE OF PROPORTION					
A1	Auger Sample	B1	BLACK	B2	MEDIUM	B3	WET	B4	DRY	B5	VERY DRY
C1	CHISEL SAMPLE	D1	BROWN	D2	RED	D3	ROCK	D4	CLAY	D5	CLAY
E1	DRILL OPEN	F1	COARSE	F2	SOFT	F3	ROCK	F4	CLAY	F5	CLAY
G1	DRILLING SAMPLE	G2	COARSE	G3	SOFT	G4	CLAY	G5	CLAY	G6	CLAY
H1	PITCHER SAMPLE	H2	COARSE	H3	SOFT	H4	CLAY	H5	CLAY	H6	CLAY
I1	ROCK CORE	I2	CLAY	I3	SOFT	I4	CLAY	I5	CLAY	I6	CLAY
J1	SLICED TUBE	J2	CLAY	J3	SOFT	J4	CLAY	J5	CLAY	J6	CLAY
K1	SLICED TUBE	K2	CLAY	K3	SOFT	K4	CLAY	K5	CLAY	K6	CLAY
L1	THIN-SHELL, OPEN	L2	FRAGMENTS	L3	SOFT	L4	PRESSURE HYDRAULIC	L5	PRESSURE HYDRAULIC	L6	PRESSURE HYDRAULIC
M1	THIN-SHELL, PISTON	M2	GRANULE	M3	SOFT	M4	REFRACTORY ALUMIN	M5	REFRACTORY ALUMIN	M6	REFRACTORY ALUMIN
N1	WASH SAMPLE	N2	LAYERED	N3	SOFT	N4	REFRACTORY ALUMIN	N5	REFRACTORY ALUMIN	N6	REFRACTORY ALUMIN
O1	LITTLE	O2	ROCK	O3	SOFT	O4	REFRACTORY ALUMIN	O5	REFRACTORY ALUMIN	O6	REFRACTORY ALUMIN

ELEV. DEPTH	DESCRIPTION	BLOWN - FT	SAMPLES				SAMPLE DESCRIPTION AND BORING NOTES
			NO.	TYPE	NAME & LENGTH OF HAMMER	REC. ATT.	
0	GROUND SURFACE						(1) loose med. brown, f. SAND, little Silt, complete dry
2		6	1	5	3-3	12/24	(2) v. loose med. brown f. tan, f. SAND, little silt, wet
4		2	2	DO	1-1	10/24	(3) 4.5-6.0: Compact, gray f. tan, CLAY and SAND, wet, mottled mica
6		15	3	DO	2-5	20/24	(4) Compact, gray w/mottled red, CLAY and SAND, wet, mica
8		30	4	DO	11-12	18/24	(5) Compact, gray w/little red or stratif, clay, some f. sand wet.
10		21	5	DO	18-22	18/24	(6) Dense, gray, CLAY, li. Squish
12		32	6	DO	13-14	18/24	(7) 12-13 sec. 12.5-14, cp. light w/SAND trace f. tan, wet
14		18	7	DO	6-7	18/24	(8) 14-15.5 cp. gray, f-vt SAND, some lsand silt, 15.5-16 white, fine SAND trace silt wet
16		27	8	DO	3-8	10/24	(9) tan, pinkish tan, f-vt SAND trace lo. some silt clay, caving is variable, some brown streaks, but mainly pinkish tan
18		31	9	DO	11-13	22/24	(10) cp. sand
20		21	10	DO	18-16	22/24	When sample #10 was removed, the block fell into the auger with sand up to about 16' - wash out auger with tremied potash H2O
22		3	11	DO	1-1	18/24	(11) very loose, sand, trace clayey int stringers
24		10	12	DO	2-3	6/24	(12) tan, f-vt sand, trace to little silt (core catcher broken)
26		4	13	DO	7-2	12/24	(13) tan, sand.
28			14				End of Boring @ 26' B.S.
30			15				
32			16				
34			17				
36			18				

Golder Associates  
Field Boring Log

DEPTH HOLE	40'	JOB NO.	943-367	PROJECT	KIE / PHASE II / 16A	BORING NO.	MW-8A
DEPTH SOIL DRILL	40	SA INSP.	5011B	DRILLING METHOD	HSA 4 1/2" ID	SHEET	OF
DEPTH ROCK CORE	N/A	WEATHER	Cloudy	DRILLING COMPANY	Fay Exploration	SURFACE ELEV.	
NO. DIST. SA	22	UD. SA		DRILL RIG	Mobile B-57	DRILLER	David Nealey
TEMP.	76°F	WT. SAMPLER HAMMER	140#	DRILLER	David Nealey	DATUM	MSL
DEPTH WL.	0'-2.6' BGS	WT. CASING HAMMER	140#	DROP	30"	STARTED	940, 4-12-74
TIME WL.		WT. CASING HAMMER		DROP		COMPLETED	1500, 4-12-74

SAMPLE TYPE		ABBREVIATIONS		SOIL DESCRIPTION - RANGE OF PROPORTION	
A.S.	AUGER SAMPLE	B.	BLACK	WEIGHT	0-100
C.S.	CHARGE SAMPLE	B.D.	BROWN	SOIL	10-100
D.O.	DRIVE OPEN	B.C.	COARSE	TYPE	10-100
D.S.	DRIVEN SAMPLE	C.A.	CALICO	SIZE	10-100
P.S.	PITCHER SAMPLE	C.G.	CLAY	WATER	10-100
R.C.	ROCK CORE	C.P.	CLAYEY	PERCENT	10-100
S.T.	SLOTTED TUBE	F.P.	FRACMENTS	WATER LEVEL	10-100
T.O.	THIN-WALLED, OPEN	G.C.	GRANULAR	WEIGHT OF HAMMER	10-100
T.P.	THIN-WALLED, PISTON	G.S.	GRANULAR	YELLOW	10-100
W.S.	WASH SAMPLE	L.	LITTLE	ROCK	10-100

ELEV. DEPTH	DESCRIPTION	BLOWS / FT	SAMPLES			Z ELEV.	SAMPLE DESCRIPTION AND BORING NOTES
			NO.	TYPE	MASS PICKUP INCHES	REC. ATT.	
0	Ground Surface						(1) 0-0.3' Topsoil 0.3-1.3' tan and brown fine SAND some silt, clay.
2		(3)	1	DO	5-6-7 -6	13/24 2	(2) 2-3' CP gray fine SAND, 1.14' silt, trace clay, wet WL = 2.6' BGS
4			2	DO	6-6-5-2	21/24 4	3-4' gray fine SAND, some s. Hickey
6			3	DO	4-3-7-9	24/24 6	(3) CP 4-5' SAND 5"-6" gray with tan mottles, fine SAND and silty clay.
8			4	DO	13-16-19 -19	22/24 8	(4) dn, 6-7' sand 7-8' gray, fine SAND, some silt, clay tan & orange mottling.
10			5	DO	10-17 28-32	20/24 10	(5) dn, 8-8.5' sea 8.6-10' tan fine sand some mottled
12			6	DO	7-15 25-25	24/24 12	little silty clay, orange mottles (6) dn, tan fine sand trace coarse silt, orange mottles 11.5'
14			7	DO	4-12-32 -26	24/24 14	(7) dn, 12-13.5' sand, but no mottles 13.5-14' tan, fine sand 1.14'
16			8	DO	10-18-27 -24	24/24 16	(8) dn, tan, fine sand trace silt, few pink spots
18			9	DO	6-16 22-17	24/24 18	(9) dn, sand with trace gravel driller inserted tremie pipe into a-sus Flushed out sand from within
20			10	DO	14-11-16 -17	24/24 19	(10) op. sand, gravel = km size
22			11	DO	3-3-9-12	24/24 22	(11) cp. sand (12) w/o no sample collected
24			12	DO	15-31 58-59	0/24 24	(13) van. light gray, coarse SAND and fine sand trace PO4 nodules trace silt, trace silty clay blocks
26			13	DO	15-31 58-59	16/24 26	(Span opened to be amphibolite boulders) (14) van. sand samples to all faces
28			14	DO	11-22-30 -46	24/24 28	(15) 28.5-29.5 vdm sand 29.5-30' tan F. SAND, stratified w/ orange layers (6in thick), trace silt, etc
30			15	DO	10-26- 41-50	24/24 30	(16) vdm sand only 10" of sand was true sample, 14" was re-in mixture.
32			16	DO	20-40 50/50-50	24/24 32	(17) van. gray, fine SAND trace silt, only 8" true sample.
34			17	DO	28-50 50	24/24 34	(18) van. sand only 3" true sample
36			18	DO	20-27 50	24/24 36	(19) cp. sand v. thin clay strata @ 38'
38			19	DO	14-13-3 8	24/24 38	(20) cp. gray, med SAND 1.14' grain some coarse sand, 1.14" silt, etc shaly layer @ 39.9'
40			20	DO	55-6-8	24/24 40	16" true sample END OF BORING @ 40' BGS
	END OF Boring @ 40' BGS						

15-4 77-47

15-4 77-47

Golder Associates  
Field Boring Log

DEPTH HOLE	31.0'	JOB NO.	923-3627	PROJECT	K3/E / PHASE II / GA	BORING NO.	MW-9
DEPTH SOIL DRILL	31.0'	SA INSP.	S.G.H.B.	DRILLING METHOD	Mud Rotatory - 6" bit	SHOOT	1 OF 1
DEPTH ROCK CORE	WEATHERED			DRILLING COMPANY	Environmental Exploration	SURFACE ELEV.	
NO. DIST. SA.	7	UD. SA.	TEMP.	DRILL RIG	Mobile Drill B-57	DATUM	MSL
DEPTH WL.		HRS. PROD.	82°F	DRILLER	D. Nallea	STARTED	1650, 4-14-94
TIME WL.		HRS. DELAYED		WT. SAMPLER HAMMER	140 lbs. DROP 30"	COMPLETED	1700, 4-14-94
				WT. CASING HAMMER	DROP		

SAMPLE TYPES		ABBREVIATIONS		SOIL DESCRIPTION - RANGE OF PROPORTION					
A.S.	AUGER SAMPLE	B.	BLACK	M.	MEEDIUM	T.	TRACE	0-10%	SOILS 12-20%
C.S.	CHUNK SAMPLE	B.R.	BROWN	M.C.	MICROSCOPIC	SAT.	SATURATED	11-20%	20-60%
D.O.	DRIVE OPEN	B.G.	GRAY	M.T.	MOTTLED	S.G.	SOFT	VS	STRUCTURE
D.S.	DRIVEN SAMPLE	B.L.	LIGHT	M.P.	MUD PLASTIC	S.V.	STIFF	S.F.	MOLDS EASILY
P.C.	PICKET SAMPLE	B.C.	CLAY	O.	ORGANIC	S.T.	VERY STIFF	S.F.	MOULD
R.C.	REMOVED CORE	B.C.	CLAYTY	P.H.	PRESSURE HYDRAULIC	T.	ROCK	ST.	TRAIL HIGHLIGHTS
R.T.	SLICED TUBE	F.P.	FRAGMENTS	P.H.	PRESSURE HYDRAULIC	W.L.	WEIGHT OF HAMMER	V.S.	RESISTS THUNDERING
T.O.	THIN-WALLED OPEN	F.G.	GRAVEL	P.L.	PRESSURE HYDRAULIC	W.H.	WEIGHT OF HAMMER		
T.P.	THIN-WALLED PISTON	L.T.	LAYERED	R.	RED				
W.S.	WASH SAMPLE	L.T.	LITTLE	R.E.	RESIDUAL				
		U.	WHITE	R.F.	ROCK				

ELEV. DEPTH	DESCRIPTION	BLOWS / FT	SAMPLES				SAMPLE DESCRIPTION AND BORING NOTES	
			NO.	TYPE	MASS & VOLUME (POUNDS) (FORCE)	REC. ATT.		
	Ground Surface						(1) dn, 0-0.3 "topsoil" = filled material 0.3-0.5 asphalt	
2		38	1	DO	6-19-19 19	14/ 14	0'- 2'	0.5-2.0 very fine SAND little to some silt few tan m. fine + some fill material (sand + gravel + boulders)
4		12	2	DO	7-7-53	1/ 14	4'- 6'	(2) cp, 4-5, gray fine SAND and silt clay few tan mottles wet - 5.0-5.5 gray sandy CLAY
6							- Driller thinks the inter sample interval was short	
8							- 9.0-9.3 gray sandy CLAY orange red	
10		57	3	DO	12-24 -33-28	19/ 24	9'- 11'	- (5) July, 9.3-9.6 gray Fine SAND and clay then interbedded clay lenses Mottled with tan, pink orange 9.6-10 yellow, fine SAND and clay
12							- 10.0-10.4 orange fine SAND trace to little silty clay. Grain size coarsening downward. Chlorite decreases	
14			4	DO	20-19- 28-28	23/ 24	14'- 16'	- (4) dn, 14-15 light gray fine SAND and clay trace gravel 14.5-15.9 light gray F-m SAND, trace silt, trace coarse sand. trace gravel
16							- Yellow loam 0 15.3-15.6	
18			5	DO	14-16-17 -14	28/ 24	17'- 21'	- (5) dn, 1st top gray F-m-e SAND, trace gravel, trace silt. (no grading evident in entire 2' son very soft)
20		35					- (6) dn, 28-25-24 gray silty CLAY (?) @ 25' is a fossilized pine cone 25.22m gray fine SAND, trace silt	
22			37	DO	3-15-24 19	24/ 24	24'- 26'	- 25.0-25.1 dk gray F-m-e SAND and CLAY
24								
26								
28								
30	END OF BORING	30	7	DO	16-15-15 15	23/ 14	29'- 31'	(7) dn, gray F-m SAND, trace to little silt + thin clay layer @ 29.7 (1cm)
32	@ 31.0' BGS							

**Golder Associates  
Field Boring Log**

DEPTH HOLE	<u>17.0'</u>	JOB NO.	<u>943-2627</u>	PROJECT	<u>KSE / Phase II TGA</u>	BORING NO.	<u>MW-10</u>
DEPTH SOIL DRILL	<u>27.0</u>	GA INSP.	<u>PA HB</u>	DRILLING METHOD	<u>Mad Rotam 6" 5+</u>	SHOOT	<u>1 OF 1</u>
DEPTH ROCK CORE	<u>-</u>	WEATHER	<u>p. cloudy</u>	DRILLING COMPANY	<u>Environmental Exploration</u>	SURFACE ELEV.	<u>-</u>
NO. DWT. SA.	<u>5</u>	UD. SA.	<u>80°</u>	DRILL RIG	<u>Mobile Drill BST</u>	DATUM	<u>MSL</u>
DEPTH WL.	<u>-</u>	HRS. PROD.	<u>-</u>	DRILLER	<u>R. Nelles</u>	STARTED	<u>1/30, 4/14/74</u>
TIME WL.	<u>-</u>	HRS. DELAYED	<u>-</u>	WT. SAMPLER HAMMER	<u>40#</u>	COMPLETED	<u>1500, 4/14/74</u>
				WT. CASING HAMMER	<u>30"</u>		
				DROP	<u>30"</u>		

**SAMPLE TYPES**

AS. ALUMINUM SAMPLE  
CS. CHUNK SAMPLE  
DO. DRIVE OPEN  
DS. DENSIMETER SAMPLE  
PS. PITCHER SAMPLE  
RC. ROCK CORE  
ST. SLOTTED TUBE  
TO. THIN-WALLED, OPEN  
TP. THIN-WALLED, PISTON  
WS. WASH SAMPLE

**ABBREVIATIONS**

BL. BLACK  
BR. BROWN  
C. COARSE  
CA. CASING  
CL. CLAY  
CLY. CLAYET  
F. FINE  
FRAG. FRAGMENTS  
G. GAVEL  
LVS. LAYERED  
L. LITTLE

M. MEDIUM  
MC. MICACEOUS  
MOT. MOTTLED  
NP. NONPLASTIC  
OG. ORANGE  
ORG. ORGANIC  
PH. PRESSURE HYDRAULIC  
PN. PRESSURE MANUAR  
P. PEG  
RES. RESIDUAL  
R. ROCK

**SAMPLE**

SA. SATURATED  
SO. SAND  
SILT  
SLTY.  
SOH. SOME  
TR. TRACE  
WL. WATER LEVEL  
WH. WEIGHT OF HAMMER  
Y. YELLOW

**SOIL DESCRIPTION - RANGE OF PROPORTION**

TRACE	0-5%	WEET	12-30%
TOTAL	5-10%	WEAK	30-60%
RELATIVE DENSITY	GLCONS	CONSISTENCY	PERMEABILITY
VEY LOW	VS 0-4	VERY SOFT	VS EXTREMELY
LOW	VS 4-10	SOFT	SOIL EASILY
MED	VS 10-20	MED	DRILLED
HIGH	VS 20-50	STIFF	TESTED
VEY HIGH	VS 50	VERY STIFF	TESTED
Y	Y	Y	TESTED

ELEV. DEPTH	DESCRIPTION	BLOWS /ft	SAMPLES				Z IN CH	SAMPLE DESCRIPTION AND BORING NOTES
			NO.	TYPE	MASS OF HAMMER (OZ) FORCE	REC ATT		
0	Ground Surface							(1) cp. 4.0-4.5', light gray, fine SAND and silty clay, orange mottles
2								4.7-6.0' light gray silty CLAY some loam fine sand, orange red mottles. 5.6-5.8' very stony mottled oxidized zone. Bright red clay
4		23	1	DO	4-8-15 20	23/4	4-	
6								
8	Light gray to orange, fine SAND 1.1 ft to sand silt clay.	-10	2	DO	10-6-4 6	23/4	8- 10	(2) CP. 8-8.1 sea 8.1-9.0 light gray fine SAND little to some silt.
10								9.0-9.5 orange fine SAND 1.1 ft to some silty clay.
12								9.5-10 light gray sandy CLAY with trace orange mottles.
14								Driller thinks clay penetrated @ = 12-12.5 ft BGS
16		21	3	DO	7-9-12 13	18/ 24	14- 16	(3) CP. light gray tanish, fine SAND trace silt. (Very clean sand, well sorted. Upper part of sample stained brown by d. 1.1 ft)
18								
20		23	4	DO	15-12-11 -11	20/ 24	17- 21	(4) CP. 19-20.4 light gray to white, fine SAND 1.1 ft to some silt clay.
22								20.4-21 light gray m-c SAND 1.1 ft gravel
24								* Driller drilled to 24' BGS = circulated mud through borehole. When sample rod struck place in hole. Depth indicated was 25' in mud circulation is washing down hole → coarse SAND
26		84	5	DO	35-37- 42-44	31/ 44	22- 24	(5) yellow tan because. Fine SAND smooth coarse sand, trace silt, 1.1 ft has trace little gravel, orangy-red mottles in 26-28 feet natural
28	End of Boring @ 27.0' BGS							Boring terminated @ 27' BGS

**Field Boring Log**

DEPTH HOLE	260	JOB NO.	23-360	PROJECT	KTF / PHASE II / 6A	BORING NO.	MN-11
DEPTH BOX DRILL	260	SA INSP.	PAUL	DRILLING METHOD	Mud Rotating 6" bit	SHEET	OF
DEPTH ROCK CORE	NA	WEATHER	SOAMY	DRILLING COMPANY	Environmental Exploration	SURFACE ELEV.	
NO. DUST. SA.	5	U.D. SA.	-	DRILL RIG	Mobile Drill BS7	DATUM	MSL
DEPTH WL.		HRS. PROB.		DRILLER	D. Nelles	STARTED	1440, 4-15-14
TIME WL.		HRS. DELAYED		WT. SAMPLER HAMMER	140#	DROP	30°
				WT. CASING HAMMER	-	DROP	-
						COMPLETED	1345, 4-15-14

**SAMPLE TYPES**

A.S. AUGER SAMPLE  
C.A. CUBE SAMPLE  
D.O. DRIVE OPEN  
D.S. DENSIMETER SAMPLE  
P.A. PITCHER SAMPLE  
R.C. ROCK CORE  
S.T. SLOTTED TUBE  
T.O. THIMMALLIED OPEN  
T.P. THIMMALLIED PISTON  
W.S. WASH SAMPLE

B. BLACK  
BR. BROWN  
C. COARSE  
CA. CASINO  
CL. CLAY  
CLT. CLAYET  
F. FINE  
FRAG. FRAGMENTS  
GL. GRAVEL  
LTD. LAYERED  
L. LITTLE

**ABBREVIATIONS**

M. MEDIAN  
MECASCOUS  
MOT. MOTTLED  
NP. NON-PLASTIC  
O. ORANGE  
ORG. ORGANIC  
PH. PRESSURE/HYDRAULIC  
PR. PRESSURE/ARMALIC  
R. RED  
RE. RESIDUAL  
R. ROCK

**SOIL DESCRIPTION - RANGE OF PROPORTION**

TRACE - 0-5%	TONE - 12-30%		
TYPICAL - 5-15%	ABUNDANT - 30-50%		
RELATIVE DENSITY	GLARE	CONSISTENCY	PROBLEMS/FEATURES
VERY LOW	YEL. 0-4	VERY SOFT	VS. EXTRACTIVE
LOW	15. 4-10	SOFT	S. MOISTURE TABLE
MEDIUM	25. 10-20	COMPACT	C. HOLLOW SPACES
HIGH	35. 20-30	DENSE	D. SWELLING
VERY HIGH	40. 30-50	STIFF	ST. TAKING HAMMER HEAD
			N. RESIST TO THRESHOLD

ELEV. DEPTH	DESCRIPTION	BLOWS FT	SAMPLES				DEPTH ft	SAMPLE DESCRIPTION AND BORING NOTES
			NO.	TYPE	DEPTH INCHES	REC. ST		
0								(1) 15' gray, fine SAND some clay (no grading apparent)
2								
4			6					
6								
10	34		1	DD	5-3-3-2	20/ 24	4-6	
12								
14			2	DD	11-15-14	16/ 20	9- 11	(2) dn. 9-9.5 gray, Fine SAND, trace b. little silt, trace mud/mottles 9.5-10.5 dk brn, Fine SAND trace silt. This brown sand has a very slight indistinguishable odor. Am not sure if it is a natural organic material or odor or not.
16			3	DD	18-18-23	17/ 19	10- 16	(3) dn. 14-15.1 pinkish-tan, Fine SAND trace silt. @ 14.3' array thin (clay) sandy clay lens 15.1-15.4 gray, F-m SAND trace coarse sand, trace silt
18			4	DD	16-14- 15-15	23/ 24	17- 21	(4) 19-19.9 tan/tan, F-m-C SAND, some clay, tan/mottles 19.9-20.7 gray, F-m SAND, trace coarse sand, trace b. little clay tan & pink mottles.
20			5	DD	25-24-21	24/ 34	24- 26	(5) 24-24-25 gray F-m SAND, trace coarse sand, trace silt. C-w orange mottles 25-26 yellow-tan, Fine SAND trace silt. as br mottles.
22								
24								
26								
28								
30								
								End of Boring @ 26.0' BGS

Golder Associates  
**Field Boring Log**

DEPTH HOLE 26' JOB NO 943-3627 PROJECT KEE / PHASE II / GA BORING NO. MW-12  
 DEPTH SOIL DRILL 26' QA INSP. S.G.H.B. DRILLING METHOD Mixed Rotatory - 6" Bit SHEET 1 OP 1  
 DEPTH ROCK CORE  WEATHER D.Cooly DRILLING COMPANY Env. Exploration SURFACE ELEV.   
 HQ.DIST.SA. 2.00 SA. 8 TEMP. 83°F DRILL RIG Mobile Drill 8-5T DRILLER D.Welles DATUM MSL  
 DEPTH WL.  MRS. PROD.  WT. SAMPLER HAMMER 140 lb. DROP 30" STARTED 1100 / 4-16-94  
 TIME WL.  MRS. DELAYED  WT. CASING HAMMER — DROP — COMPLETED 1200 / 4-16-94

Golder Associa  
**Field Boring - 99**

DEPTH HOLE 21' JOB NO. 943-3627 PROJECT KIE / PHASE II / 6A  
 DEPTH SOIL DRILL 21' GA. INSP. B6HB DRILLING METHOD Aux. Rotory 6" diamond bit  
 DEPTH ROCK CORE N/A WEATHER P. cloudy DRILLING COMPANY Env. Exploration  
 NO. DIST. SA. 4 UO. SA. 6 TEMP. 88°F DRILL RIG Mobile Drill R-57 DRILLER D. Wallace  
 DEPTH WL. \_\_\_\_\_ HRS. PROD. 1 WT. SAMPLER HAMMER 140 lbs DROP 30" STARTED 1505, 4-16-94  
 TIME WL. \_\_\_\_\_ HRS. DELAYED 0.75 WT. CASING HAMMER — DROP — COMPLETED 1700, 4-16-94  
 BORING NO. MW-3A SHEET 1 OF 1 SURFACE ELEV. —  
 DATUM MSL

SAMPLE TYPES	ABBREVIATIONS	SOIL DESCRIPTION - RANGE OF PROPORTION
A.S. ALUMINUM SAMPLE	SL BLACK	TRACE - 0-5%
C.A. CALCIUM SAMPLE	BR BROWN	50% - 12-20%
D.O. DRYER OPEN	C COARSE	5% - 1-10%
D.S. DRYER SAMPLE	M MEDIUM	50% - 10-40%
P.A. PITCHER SAMPLE	MC MICA/CASSIUS	5% - 1-10%
R.C. ROCK CORE	MOT MOTTLED	5% - 1-10%
S.T. SLOTTED TUBE	NP NONPLASTIC	5% - 1-10%
T.D. THIMBELLER, OPEN	CL CLAY	5% - 1-10%
T.P. THIMBELLER, PISTON	CLT CLAYET	5% - 1-10%
W.B. WASH SAMPLE	CRS CRYSTALLIC	5% - 1-10%
	PH PRESSURE-HYDRAULIC	TRACE
	PM PRESSURE-MANUAL	WL WATER LEVEL
	SLG SANDY	WH WEIGHT OF HAMMER
	LTD LAYERED	Y YELLOW
	LTU LITTLE	
	RT ROCK	
		RELATIVE DENSITY
		SLIQUE
		CONSISTENCY
		POSS. PRESSURE
		VERY LOOSE
		VS VS
		VERY SOFT VS
		ST ST
		SOFT VS
		LOOSE LS 4-10
		COMPACT CP 10-20
		STYLIC STYLIC
		STYLIC HEAVY STYLIC HEAVY
		VERY STYLIC VST VST
		HEAVY HEAVY
		SOFT STYLIC SOFT STYLIC

# MONITORING WELL INSTALLATION LOG

JOB NO.	943-3627	PROJECT	K3E / PHASE II / GA	WELL NO.	MW-34	SHEET	1	of		
GA INSP.	RGHB	DRILLING METHOD	Mud Rotary 6" d torque bit	GROUND ELEV.		WATER DEPTH				
WEATHER	Cloudy	DRILLING COMPANY	Environmental Exploration	COLLAR ELEV.		DATE/TIME				
TEMP.	86°F	DRILL RIG	Mobile Drill B-57	DRILLER	D. Nallea	STARTED	1715	4-16-94	COMPLETED	1930

## MATERIALS INVENTORY

WELL CASING	2	in. dia.	10	WELL SCREEN	2	in. dia.	10	BENTONITE SEAL	med. chips
CASING TYPE	SCH 40 PVC			SCREEN TYPE	SCH 40 DUC			INSTALLATION METHOD	hand placed
JOINT TYPE	Flush threaded			SLOT SIZE	0.010"	Factory slotted		FILTER PACK QTY	3 x 50 lb. bags
GROUT QUANTITY	= 6 gallons			CENTRALIZERS	NA			FILTER PACK TYPE	Silica sand
GROUT TYPE	cement/bentonite			DRILLING MUD TYPE	CETCO Super Gel X			INSTALLATION METHOD	Washed through tremie pipe w/ Potable water

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
	GROUND SURFACE		
0.0		2' 2" Flush mount surface completion	Used: 1x 10' Screen 3x 5' Riser
2		→ cement/bentonite grout	Riser cutoff at surface for flush mount surface completion
4		~ 3.8'	
6		→ bentonite seal	
8		~ 7.0'	
10		~ 10'	
12		→ Filter pack	
14			
16			
18			
20		20' end cap.	
22		End of Boring @ 21' BGS	
24			
			WELL DEVELOPMENT NOTES

# MONITORING WELL INSTALLATION LOG

JOB NO. 943-3627 PROJECT KSE / PHASE II / GA  
 QA INSP. B&H/B DRILLING METHOD HSA - 4  $\frac{1}{2}$ " ID  
 WEATHER Sunny DRILLING COMPANY Environmental Exploration  
 TEMP. 82°F DRILL RIG Mobile Drill B-57 DRILLER D. Nalba  
 WELL NO. MW-7 SHEET 1 of 1  
 GROUND ELEV. WATER DEPTH  
 COLLAR ELEV. DATE/TIME  
 STARTED 4-11-94 TIME / DATE COMPLETED 4-13-94 TIME / DATE

## MATERIALS INVENTORY

WELL CASING	2 in. dia.	15.7 ft.	WELL SCREEN	2 in. dia.	10 ft.	BENTONITE SEAL	med. chips
CASING TYPE	SCH 40 PVC		SCREEN TYPE	SCH 40 PVC		INSTALLATION METHOD	hand placed
JOINT TYPE	flush threaded		SLOT SIZE	0.010"	factory slotted	FILTER PACK QTY	5x50lb bags
GROUT QUANTITY	=14 gal/ft.		CENTRALIZERS	NA		FILTER PACK TYPE	Silica sand
GROUT TYPE	cement / bentonite		DRILLING MUD TYPE	NA		INSTALLATION METHOD	washed through trendle w/potable water.

ELEV/DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
	GROUND SURFACE		Used 1x10' Screen 2x10' risers Cutoff at surface for flush mount surface completion
0.0			
2.			
4			
6			
8			
10			
12			
14			
16			
18			
20			
22			
24			
26			
28			
30			

## MONITORING WELL INSTALLATION LOG

JOB NO. 943-3627	PROJECT KSE / PHASE II / GA	WELL NO. MW-8	SHEET 1 or 1
QA INSP. B6HR	DRILLING METHOD Mud Rotatory - 6"φ tri-cone bit	GROUND ELEV.	WATER DEPTH
WEATHER Partly cloudy	DRILLING COMPANY Environmental Exploration	COLLAR ELEV.	DATE/TIME
TEMP. 85°F	DRILL RIG Mobile Drill B-57 DRILLER D. Nelles	STARTED 1626, 4-13-94	COMPLETED 1030 4-13-94

## MATERIALS INVENTORY

WELL CASING 2 in. dia. 32.5	WELL SCREEN 2 in. dia. 10	BENTONITE SEAL bentonite chips
CASING TYPE SCH 40 PVC	SCREEN TYPE SCH 40 PVC	INSTALLATION METHOD hand placed
JOINT TYPE Flush Threaded	SLOT SIZE 0.010" factory slotted	FILTER PACK QTY 5 = 50 lb bags.
GROUT QUANTITY ~40 gallons.	CENTRALIZERS NA	FILTER PACK TYPE silica sand
GROUT TYPE Cement/bentonite	DRILLING MUD TYPE CETCO SuperCell X High Yield Bentonite Powder.	INSTALLATION METHOD washed through trickle pipe w/ portable water

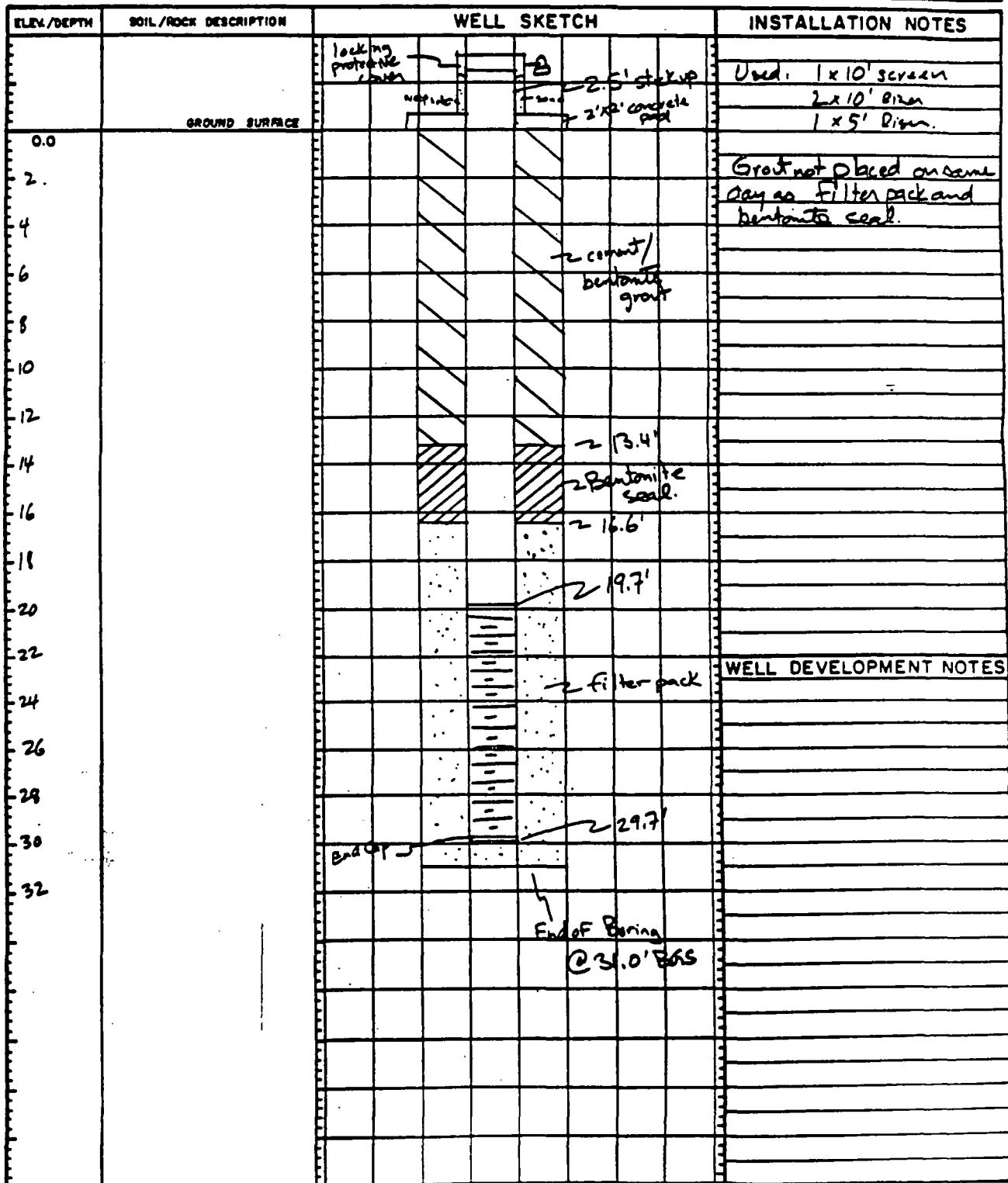
ELEV/DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		Locking Protective Cover	
0.0	GROUND SURFACE	3' diameter hole 7' x 2' cement pack	Used: 1x10' screen 3110' long 1 x 5' Riser.
2.			One stage of grout, about 20 gallons placed immediately following placement of bentonite seal. Remainder placed later, after setup of first stage, to prevent grout contamination of well.
4			
6			
8			
10			
12			
14			
16			For lithology see boring MW-8A located 10' S of MW-8
18			
20			
22			
24		~ 23.7'	WELL DEVELOPMENT NOTES
26		Bentonite Seal	Initial boring made using HSA, OD ~ 7". Hole cleaned out w/ 6"φ mud rotary bit. ~ 6000 ml in annulus of borehole/pvc pipe.
28		~ 27.0'	
30		~ 30.0'	
32			
34		~ filter pack	
36			
38			
40		~ 40.0' ~ End Cap	
42			
44		End of Boring at 43'	

## MONITORING WELL INSTALLATION LOG

Job No. 943-3627 Project K&F / PHASE II / GA  
 QA Insp. BGH/B DRILLING METHOD Mud rotary - 6" d rigonbit WELL NO. MW-9 SHEET 1 OF 1  
 WEATHER SWAMPY DRILLING COMPANY Environmental Elevation GROUND ELEV. WATER DEPTH  
 TEMP. 68°F DRILL RIG Motorized Drill B-57 DRILLER D. Nelles COLLAR ELEV. DATE/TIME  
 STARTED 9:00 4-5-94 COMPLETED 9:00 4-7-94 TIME / DATE

## MATERIALS INVENTORY

WELL CASING 2 in. dia 22.5 ft. WELL SCREEN 2 in. dia. 10 ft. BENTONITE SEAL med. chips  
 CASING TYPE SCH 40 PVC SCREEN TYPE SCH 40 PVC INSTALLATION METHOD hand placed  
 JOINT TYPE Flush Threaded SLOT SIZE 0.010" factory slotted FILTER PACK QTY 6 bags (50lb)  
 GROUT QUANTITY = 21 gallons CENTRALIZERS NA FILTER PACK TYPE Silica Sand  
 GROUT TYPE cement/bentonite DRILLING MUD TYPE CFTCO SuperGel INSTALLATION METHOD Washed through  
 X which yield Bentonite Powder trench pipe w/ portable water



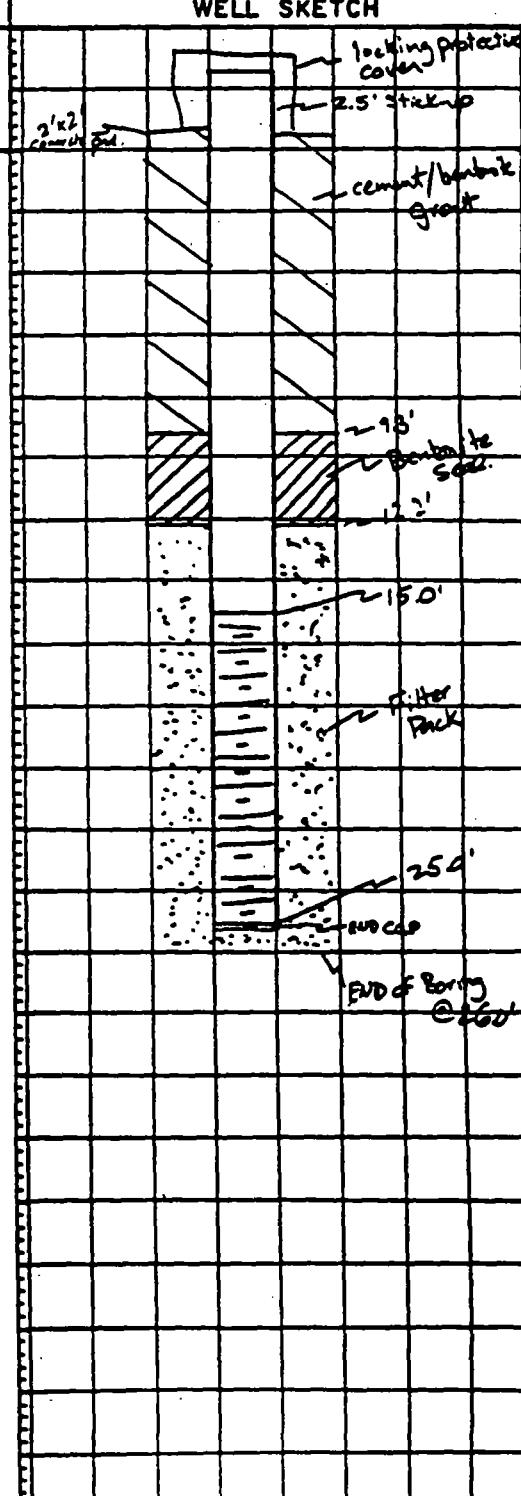
## WELL DEVELOPMENT NOTES

Bore to - 29.7'  
 End of Boring  
 @ 31.0' BGS

## MONITORING WELL INST. - ATION LOG

JOB NO. <u>943-3627</u>	PROJECT <u>KEE / PHASE II / GIA</u>	WELL NO. <u>MW-10</u>	SHEET <u>1</u> of <u>1</u>
SA INSP. <u>RCHB</u>	DRILLING METHOD <u>Mud Rotary 6"φ bit</u>	GROUND ELEV.	WATER DEPTH
WEATHER <u>Sunny</u>	DRILLING COMPANY <u>Environmental Exploration</u>	COLLAR ELEV.	DATE/TIME
TEMP. <u>82°F</u>	DRILL RIG <u>Mobile Drill B-57</u>	STARTED <u>145</u>	TIME <u>4-14-99</u> COMPLETED <u>4-17-99</u>
DRILLER <u>D Nalle</u>	TIME <u>7</u>	DATE <u>TIME</u>	

MATERIALS INVENTORY					
WELL CASING <u>2</u>	<u>m. dia</u> <u>17.5</u>	WELL SCREEN <u>2</u>	<u>m. dia</u> <u>10</u>	11	BENTONITE SEAL MUD - chips
CASING TYPE <u>SCH 40 PVC</u>		SCREEN TYPE <u>SCH 40 PVC</u>			INSTALLATION METHOD <u>hand-placed</u>
JOINT TYPE <u>flush Threaded</u>		SLOT SIZE <u>0.010"</u>			FILTER PACK QTY <u>4 x 50 lb bags</u>
GROUT QUANTITY <u>-15 gallons</u>		CENTRALIZERS <u>-</u>			FILTER PACK TYPE <u>Silica sand - filter media</u>
GROUT TYPE <u>cement/bentonite</u>		DRILLING MUD TYPE <u>Cetco Super Gel X</u>			INSTALLATION METHOD <u>tremie pipe</u>
		<u>Hrb Yield Bentonite Powder</u>			<u>mixed w/potable H2O</u>

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
0.0	GROUND SURFACE		Used 1x10' Screen 2x10' Riser cut off Riser to have a 2.5" stickup. Grout not placed on some day. Filter pack's seal was placed.
2			
4			
6			
8			
10			
12			
14			
16			
18			
20			
22			
24			
26			
28			
30			
32			
34			
			WELL DEVELOPMENT NOTES

## MONITORING WELL INSTALLATION LOG

JOB NO.	943-3627	PROJECT	K&E / PHASE II / 6A	WELL NO.	MW-11	SHEET	1	or	1		
SA INSP.	SGHB	DRILLING METHOD	Mud Rotary - 6" Q bit	GROUND ELEV.		WATER DEPTH					
WEATHER	Sunny	DRILLING COMPANY	Environmental Exploration	COLLAR ELEV.		DATE/TIME					
TEMP.	86°F	DRILL RIG	Mobile Drill-B-57	DRILLER	D. Nallen	STARTED	1600	4-15-94	COMPLETED	1100	4-17-94
				TIME / DATE		TIME / DATE					

## MATERIALS INVENTORY

WELL CASING	2	in. dia.	17.5	WELL SCREEN	2	in. dia.	10	BENTONITE SEAL	hand-placed
CASING TYPE	SCH 40	PVC		SCREEN TYPE	2010"	Factory slotted		INSTALLATION METHOD	rod chips
JOINT TYPE	Flush-Minced			SLOT SIZE	SCH 40 PVC			FILTER PACK QTY	3 x 50 lb bags
GROUT QUANTITY	~ 13 gal.			CENTRALIZERS	NA			FILTER PACK TYPE	Silica Sand - Filter
GROUT TYPE	Cement/bentonite			DRILLING MUD TYPE	CETCO Super Seal X			INSTALLATION METHOD	"tremie pipe"
					High Yield Bentonite Powder				Wetted down w/ portable H2O

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
	GROUND SURFACE		Used 1x10' screen 2x10' filter pack Cut off screen to leave a 2.5' stickup
0.0			
2			
4			
6			
8			
10			
12			
14			
16			
18			
20			
22			
24			
26			
28			
30			

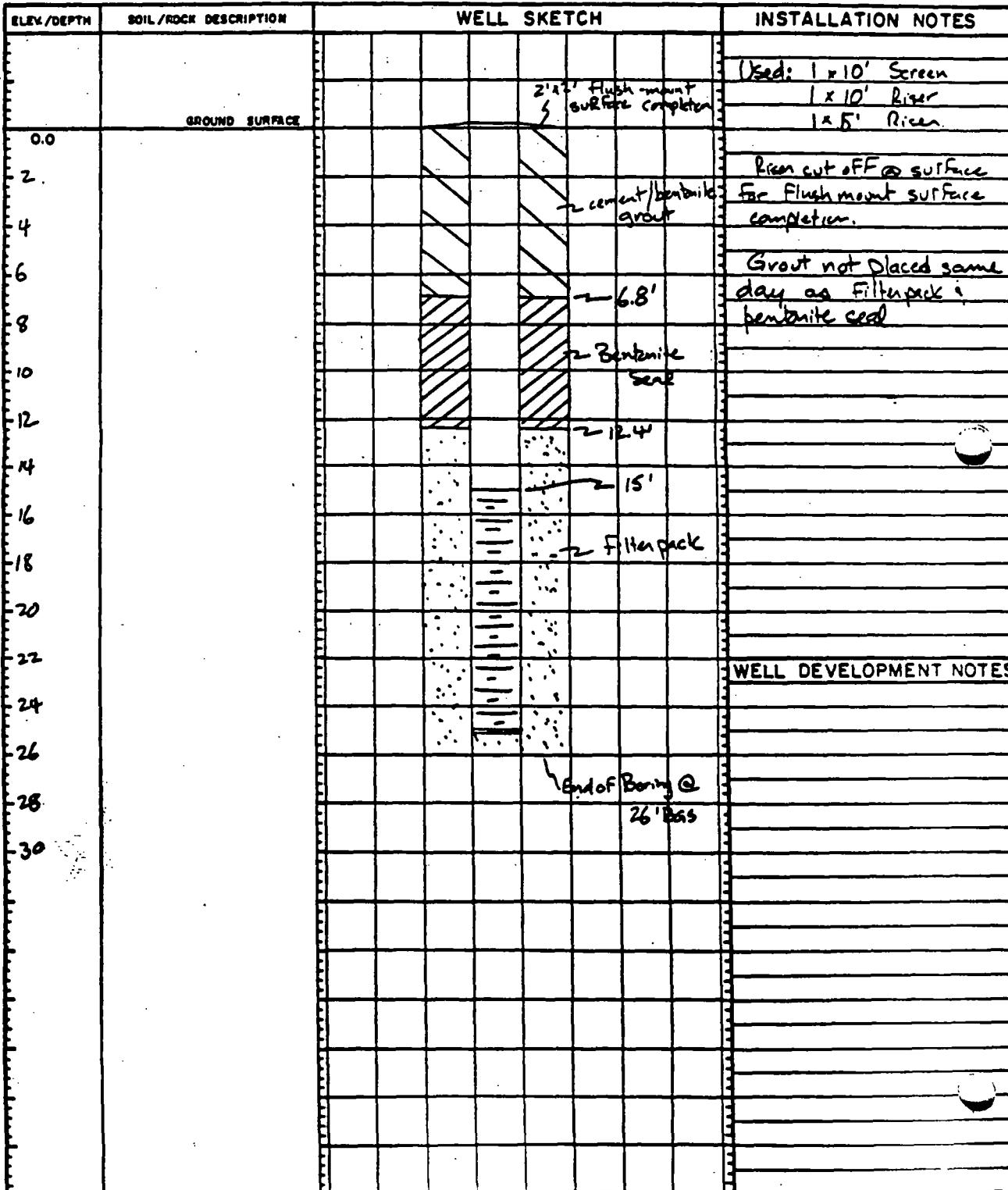
## WELL DEVELOPMENT NOTES

## MONITORING WELL INSTALLATION LOG

JOB NO.	943-3627	PROJECT	K&E / PHASE II / GA	WELL NO.	MW-12	SHEET	1 of 1
GA INSP.	B6HB	DRILLING METHOD	Mud Pottery 6" x tricone bit	GROUND ELEV.		WATER DEPTH	
WEATHER	P. cloudy	DRILLING COMPANY	Environmental Exploration	COLLAR ELEV.		DATE/TIME	
TEMP.	84°F	DRILL RIG	Mobile Drill B-57	DRILLER	D. Melko	STARTED	1221 4-6-93
				TIME	/ DATE	COMPLETED	830 4-7-93

## MATERIALS INVENTORY

WELL CASING	2 in. dia	14.9 ft	WELL SCREEN	2 in. dia.	10 ft	BENTONITE SEAL	med. chips
CASING TYPE	SCH 40 PVC		SCREEN TYPE	SCH 40 PVC		INSTALLATION METHOD	hand placed
JOINT TYPE	Flush threaded		SLOT SIZE	0.010"	factory slotted	FILTER PACK QTY	2 + 50lb bags
GROUT QUANTITY	= 11 gallons		CENTRALIZERS	NA		FILTER PACK TYPE	silica sand
GROUT TYPE	cement/bentonite		DRILLING MUD TYPE	CETCO SuperGel X		INSTALLATION METHOD	washed through tromie pipe w/potable water





**FALLING HEAD TEST MW-7**

WELL ID NUMBER:	MW-7
JOB NUMBER:	843-3627
STATIC WATER DEPTH:	4.07 FT BELOW TOC
STATIC PRESSURE:	NA PSI
STANDPIPE DIAMETER:	2.00 INCHES
SCREEN DIAMETER:	6.00 INCHES
TOP OF SCREEN:	12.50 FT BELOW TOC
BOTTOM OF SCREEN:	25.00 FT BELOW TOC
AQUIFER THICKNESS:	NA FT OR FEET

TO INDICATE BEST FIT LINE ENTER H1 AND H2

H1 = 0.601  
H2 = 0.042

H1 = 0.034  
H2 = 0.134

24 HOUR  
CLOCK  
(Hr-Min) Sec  
TIME  
(Min)

ELAPSED DEPTH TO  
WATER  
(Feet)

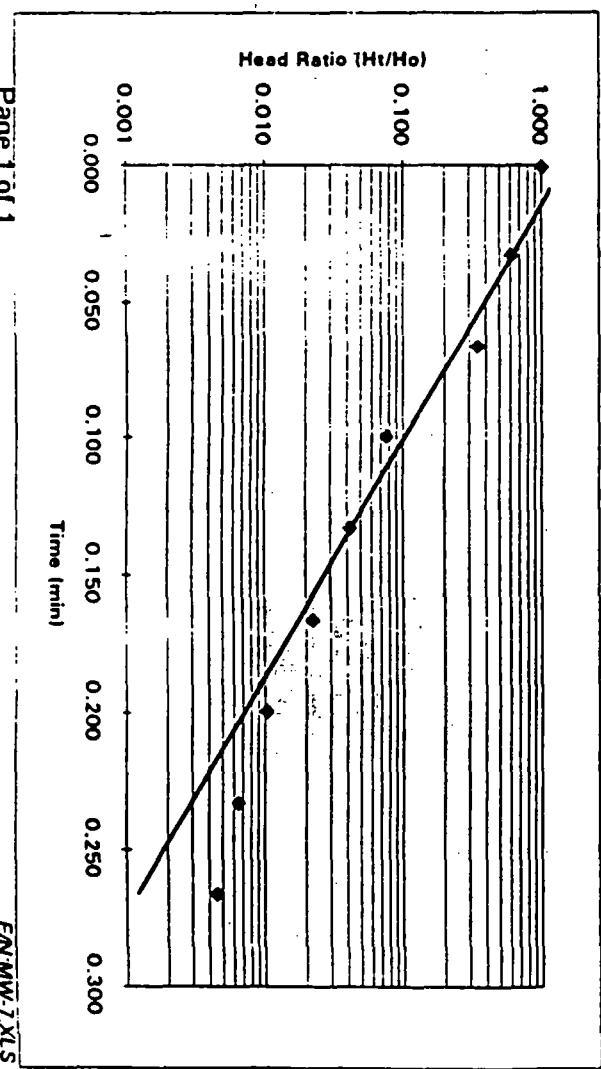
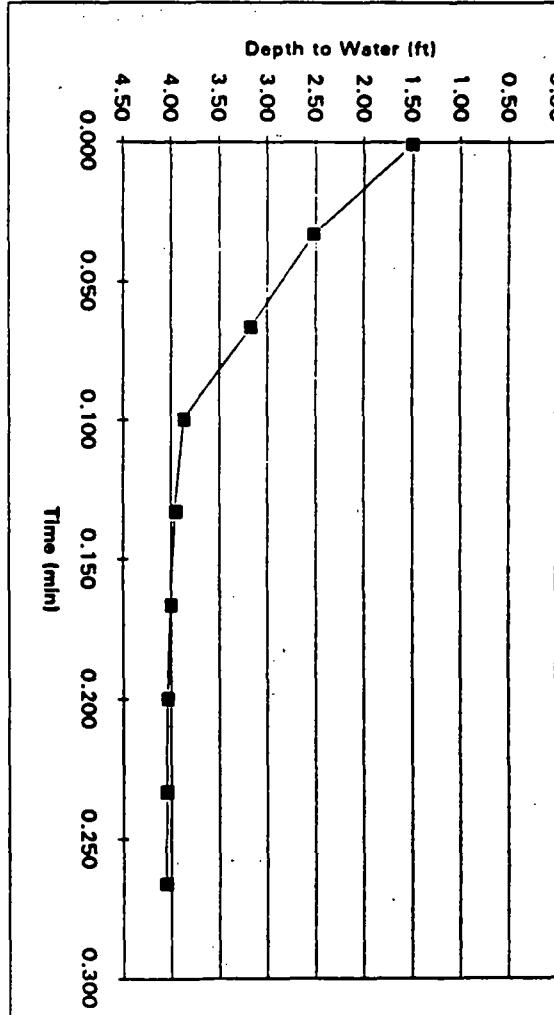
HEAD  
(Feet)

HEAD  
RATIO  
(Ht/Ho)

Test  
Interval

NA	0.001	1.50	2.570	1.000	0.000
NA	0.033	2.53	1.545	0.601	0.601
NA	0.066	3.18	0.869	0.346	0.346
NA	0.100	3.88	0.194	0.076	0.076
NA	0.133	3.96	0.107	0.042	0.042
NA	0.166	4.01	0.058	0.022	0.000
NA	0.200	4.04	0.027	0.010	0.000
NA	0.233	4.05	0.017	0.006	0.000
NA	0.266	4.06	0.012	0.005	0.000

B & R K = 1.1E-02 cm/s or 31.48 ft/d  
Hvorslev K = 1.3E-02 cm/s or 37.04 ft/d



## FALLING HEAD TEST MW-7

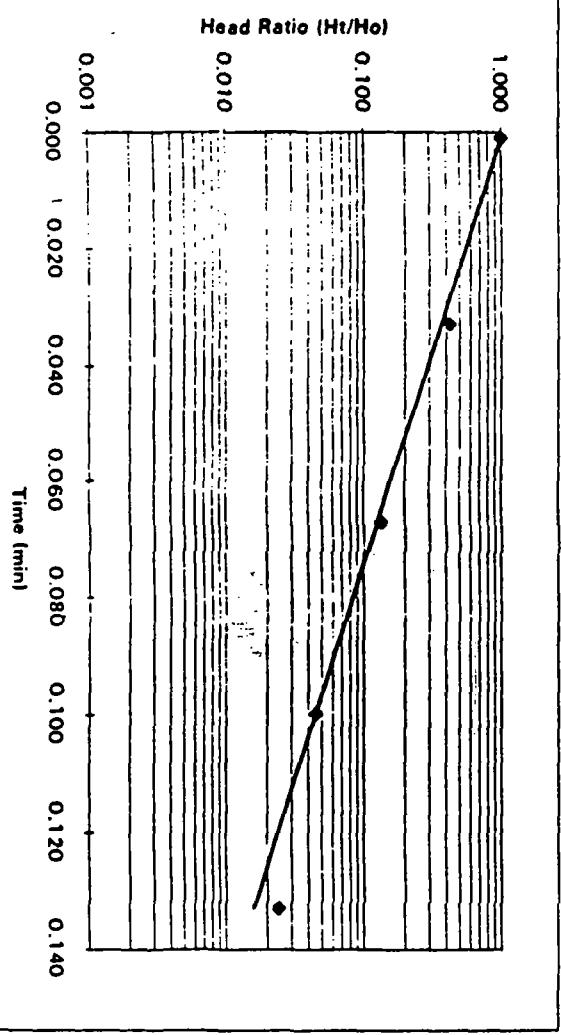
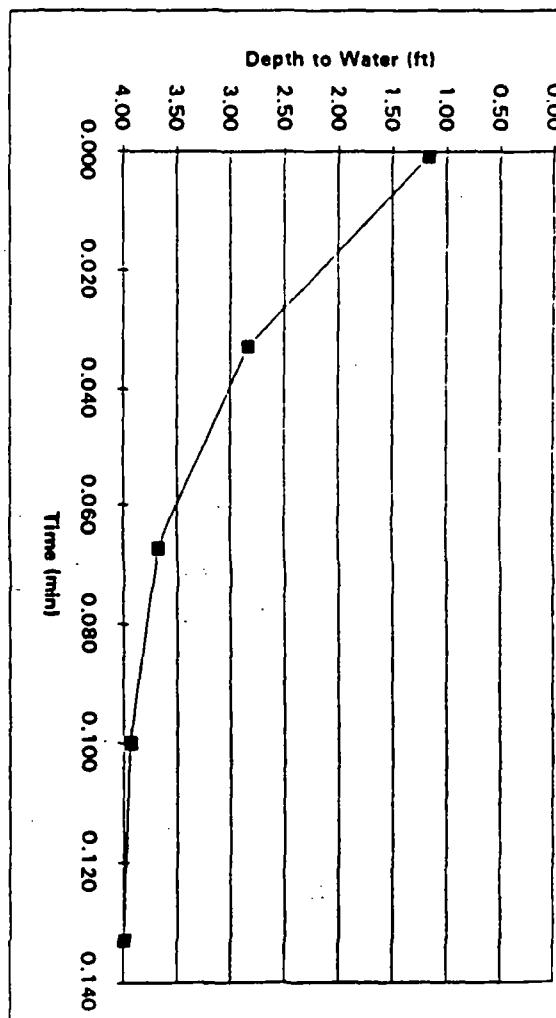
WELL ID NUMBER:	MW-7
JOB NUMBER:	943-3627
STATIC WATER DEPTH:	4.07 FT BELOW TOC
STATIC PRESSURE:	NA PSI
STANDPIPE DIAMETER:	2.00 INCHES
SCREEN DIAMETER:	8.00 INCHES
TOP OF SCREEN:	12.50 FT BELOW TOC
BOTTOM OF SCREEN:	25.80 FT BELOW TOC
AQUIFER THICKNESS:	NA FT OR FEET

TO INDICATE BEST FIT LINE ENTER H1 AND H2

$$\begin{aligned} H_1 &= 1.000 \\ H_2 &= 0.045 \end{aligned}$$

24 HOUR CLOCK (Hr-Min)	Sec	ELAPSED DEPTH TO WATER			HEAD RATIO (Ht/Ho)	Test Interval
		T <sub>1</sub> (PSI)	TIME (Min)	HEAD (Feet)		
NA	0.001	1.17	2.900	1.000	1.000	
NA	0.033	2.84	1.230	0.424	0.424	
NA	0.067	3.68	0.390	0.134	0.134	
NA	0.100	3.94	0.130	0.045	0.045	
NA	0.133	4.00	0.070	0.024	0.000	

$$\begin{aligned} B &\& R \quad K = 1.3E-02 \text{ cm/s or } 36.94 \text{ f/d} \\ & \text{Hvorslev } K = 1.5E-02 \text{ cm/s or } 43.46 \text{ f/d} \end{aligned}$$



**FALLING HEAD TEST MW-9**

WELL ID NUMBER :	MW-9
JOB NUMBER:	943-3627
STATIC WATER DEPTH=	5.93 FT BELOW TOC
STATIC PRESSURE=	NA PSI
STANDPIPE DIAMETER=	2.00 INCHES
SCREEN DIAMETER=	6.00 INCHES
TOP OF SCREEN=	16.60 FT BELOW TOC
BOTTOM OF SCREEN=	25.00 FT BELOW TOC
AQUIFER THICKNESS=	NA FEET

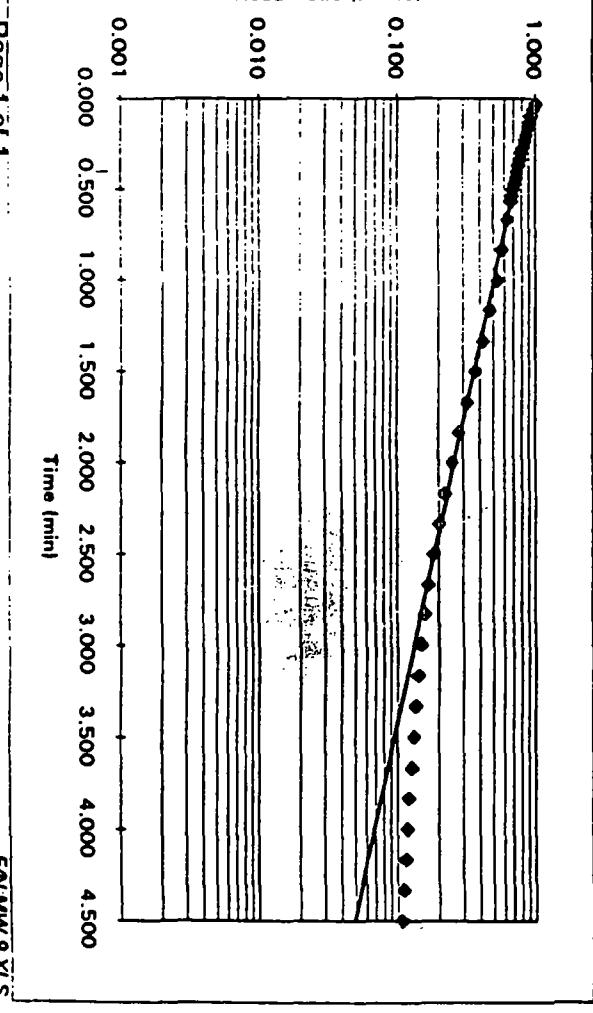
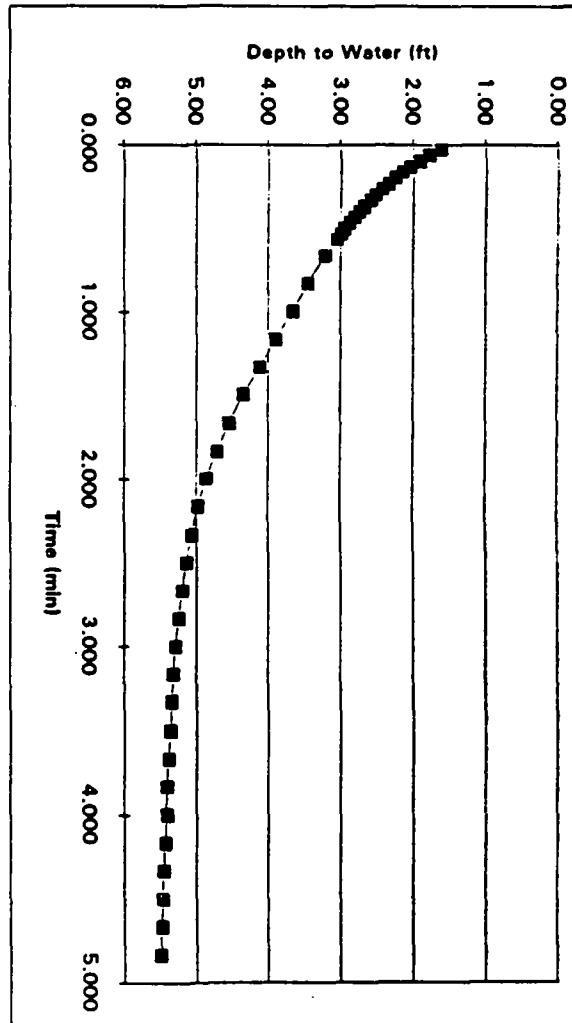
TO INDICATE BEST FIT LINE ENTER 11 AND 12

H1= 0.853  
H2= 0.320  
I1= 0.200  
I2= 1.670

24 HOUR  
CLOCK  
(Hr-Min) Sec  
TIME  
(Min)

ELAPSED DEPTH TO  
WATER  
(Feet)  
HEAD  
(Feet)  
HEAD  
RATIO  
(Ht/Ho)  
Test  
Interval

NA	0.033	1.63	4.302	1.000	0.000
NA	0.066	1.80	4.133	0.961	0.000
NA	0.100	1.93	4.000	0.930	0.000
NA	0.133	2.05	3.878	0.901	0.000
NA	0.166	2.16	3.768	0.876	0.000
NA	0.200	2.26	3.668	0.853	0.053
NA	0.233	2.35	3.579	0.832	0.032
NA	0.266	2.44	3.487	0.811	0.011
NA	0.300	2.53	3.402	0.791	0.091
NA	0.333	2.60	3.327	0.773	0.073
NA	0.366	2.68	3.253	0.756	0.056
NA	0.400	2.75	3.182	0.740	0.040
NA	0.433	2.81	3.118	0.725	0.025
NA	0.466	2.88	3.046	0.708	0.008
NA	0.500	2.95	2.985	0.694	0.094
NA	0.533	3.00	2.929	0.681	0.081
NA	0.566	3.06	2.871	0.667	0.067
NA	0.666	3.22	2.709	0.630	0.030
NA	0.833	3.46	2.475	0.575	0.075
NA	1.000	3.67	2.257	0.525	0.025
NA	1.166	3.91	2.024	0.471	0.071
NA	1.333	4.13	1.800	0.418	0.118
NA	1.500	4.35	1.579	0.367	0.167
NA	1.666	4.55	1.379	0.320	0.320
NA	1.833	4.72	1.206	0.000	0.000



**FALLING HEAD TEST MW-10**

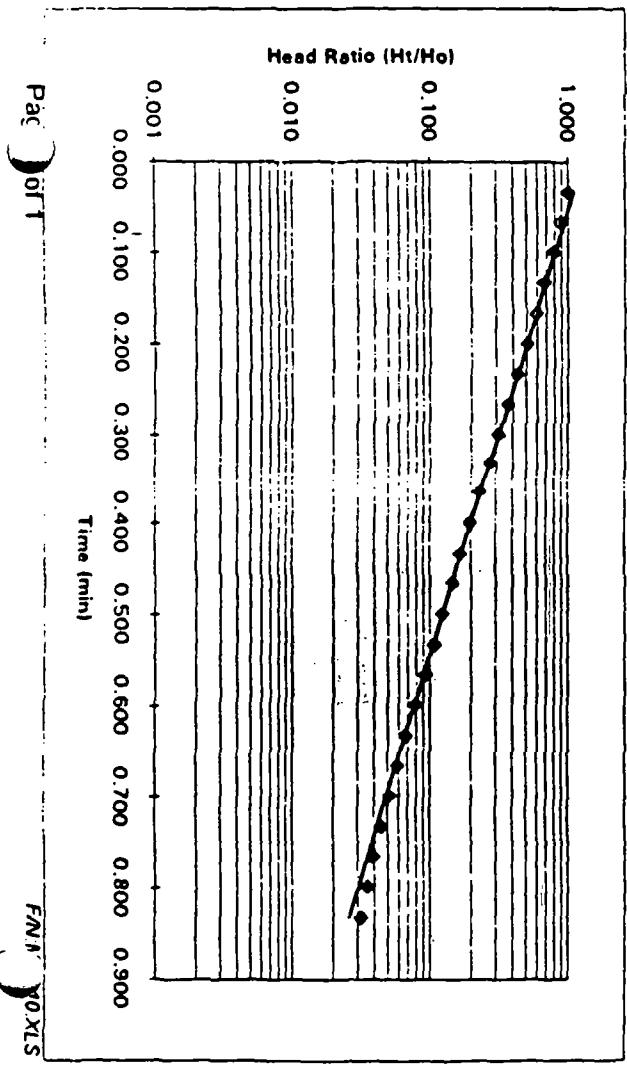
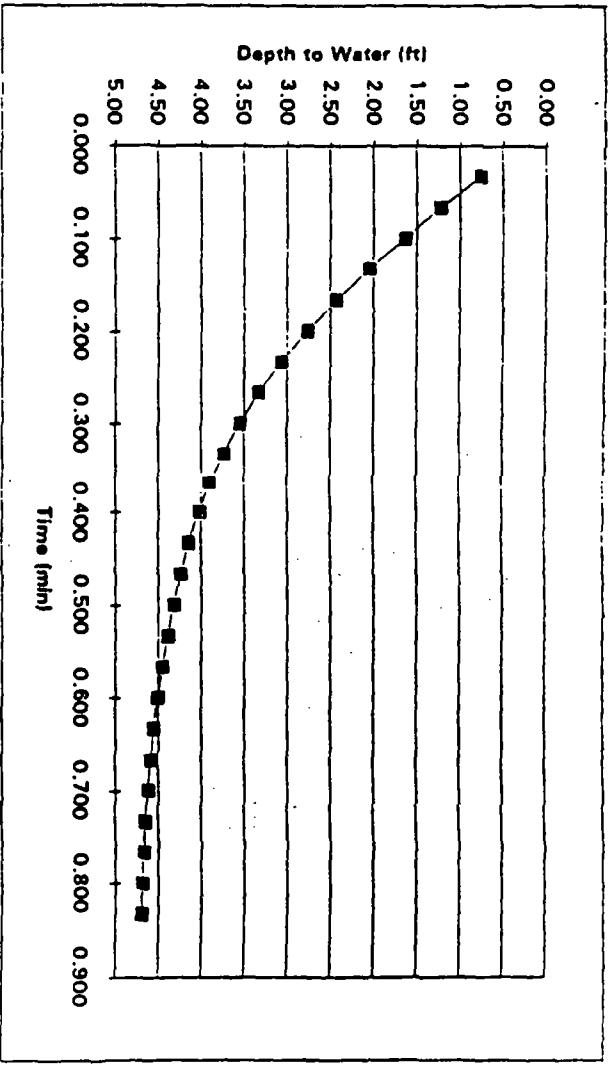
WELL ID NUMBER:	MW-10
JOB NUMBER:	943-3627
STATIC WATER DEPTH <sup>a</sup> :	4.83 FT BELOW TOC
STATIC PRESSURE <sup>a</sup> :	NA PSI
STANDPIPE DIAMETER <sup>a</sup> :	2.00 INCHES
SCREEN DIAMETER <sup>a</sup> :	6.00 INCHES
TOP OF SCREEN <sup>a</sup> :	12.20 FT BELOW TOC
BOTTOM OF SCREEN <sup>a</sup> :	25.00 FT BELOW TOC
AQUIFER THICKNESS <sup>a</sup> :	NA FEET

TO INDICATE BEST FIT LINE ENTER 11 AND 12

$$\begin{aligned} H_1^a &= 0.590 & t_1 &= 0.167 \\ H_2^a &= 0.124 & t_2 &= 0.500 \end{aligned}$$

24 HOUR  
CLOCK  
(Hr-Min)    Min    (PSI)    TIME (Min)    ELAPSED DEPTH TO WATER (Feet)    HEAD (Feet)    HEAD RATIO (Ht/Ho)

(Hr-Min)	Min	(PSI)	TIME (Min)	ELAPSED DEPTH TO WATER (Feet)	HEAD (Feet)	HEAD RATIO (Ht/Ho)	Test Interval
NA	0.033	0.77	4.062	1.000	0.000	0.000	
NA	0.066	1.23	3.604	0.887	0.000	0.000	
NA	0.100	1.65	3.183	0.784	0.000	0.000	
NA	0.133	2.05	2.776	0.683	0.000	0.000	
NA	0.166	2.43	2.397	0.590	0.590	1.000	
NA	0.200	2.77	2.059	0.507	0.507	1.000	
NA	0.233	3.08	1.755	0.432	0.432	1.000	
NA	0.266	3.34	1.490	0.367	0.367	1.000	
NA	0.300	3.55	1.276	0.314	0.314	1.000	
NA	0.333	3.74	1.092	0.269	0.269	1.000	
NA	0.366	3.90	0.930	0.229	0.229	1.000	
NA	0.400	4.03	0.796	0.196	0.196	1.000	
NA	0.433	4.15	0.678	0.167	0.167	1.000	
NA	0.466	4.24	0.588	0.145	0.145	1.000	
NA	0.500	4.33	0.502	0.124	0.124	1.000	
NA	0.533	4.39	0.438	0.108	0.108	1.000	
NA	0.566	4.45	0.377	0.093	0.093	1.000	
NA	0.600	4.51	0.320	0.079	0.079	1.000	
NA	0.633	4.56	0.272	0.067	0.067	1.000	
NA	0.666	4.59	0.237	0.058	0.058	1.000	
NA	0.700	4.63	0.205	0.050	0.050	1.000	
NA	0.733	4.65	0.181	0.045	0.045	1.000	
NA	0.766	4.67	0.158	0.039	0.039	1.000	
NA	0.800	4.69	0.144	0.035	0.035	1.000	
NA	0.833	4.70	0.129	0.032	0.032	1.000	



5/17/94

Atlanta, GA

### FALLING HEAD TEST MW-11

WELL ID NUMBER :	MW-11
JOB NUMBER:	843-3627
STATIC WATER DEPTH:	6.47 FT BELOW TOC
STATIC PRESSURE:	NA PSI
STANDPIPE DIAMETER:	2.00 INCHES
SCREEN DIAMETER:	6.00 INCHES
TOP OF SCREEN:	12.50 FT BELOW TOC
BOTTOM OF SCREEN:	25.80 FT BELOW TOC
AQUIFER THICKNESS:	NA NA or FEET

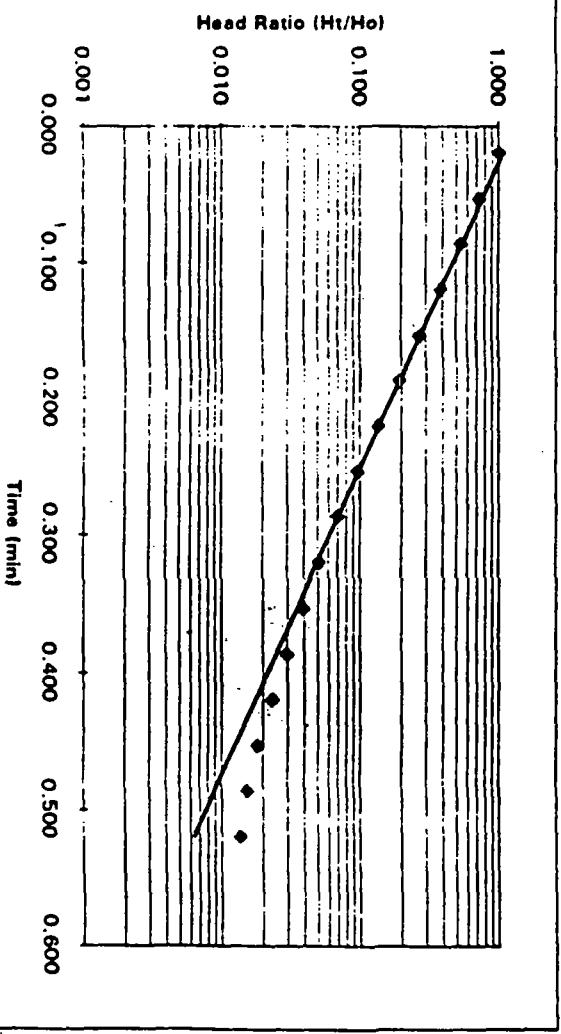
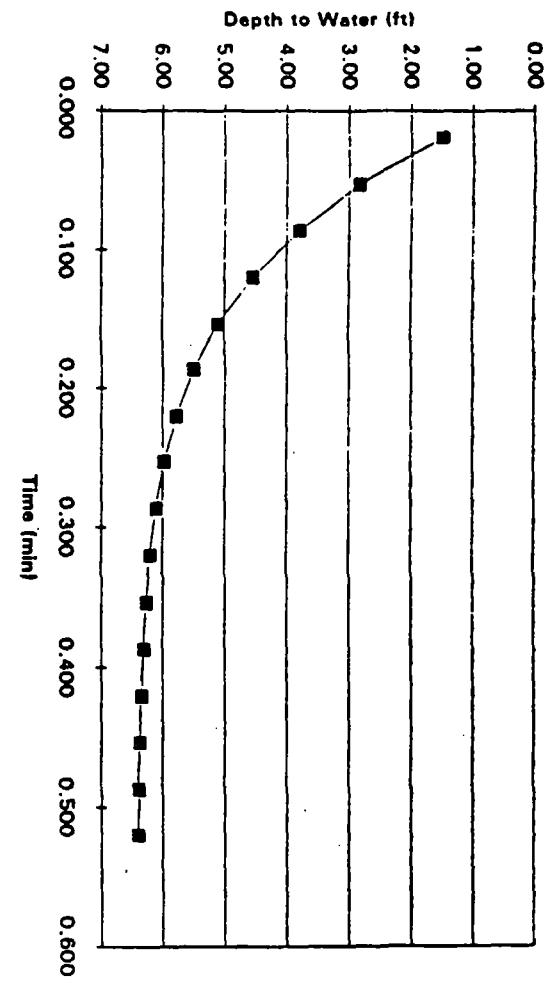
TO INDICATE BEST FIT LINE ENTER H1 AND I2

H1= 0.536  
H2= 0.069

24 HOUR  
CLOCK  
(Hr-Min) Sec

	T1 (PSI)	TIME (Min)	WATER (Feet)	HEAD (Feet)	HEAD RATIO (H/H0)	Test Interval
NA	0.020	1.50	4.970	1.000	0.000	
NA	0.053	2.85	3.622	0.729	0.000	
NA	0.087	3.81	2.663	0.536	0.536	
NA	0.120	4.56	1.910	0.384	0.384	
NA	0.153	5.12	1.354	0.272	0.272	
NA	0.187	5.51	0.955	0.192	0.192	
NA	0.220	5.79	0.680	0.137	0.137	
NA	0.253	5.99	0.483	0.097	0.097	
NA	0.287	6.13	0.344	0.069	0.069	
NA	0.320	6.21	0.256	0.052	0.000	
NA	0.353	6.28	0.192	0.039	0.000	
NA	0.387	6.32	0.149	0.030	0.000	
NA	0.420	6.35	0.115	0.023	0.000	
NA	0.453	6.38	0.091	0.018	0.000	
NA	0.487	6.39	0.076	0.015	0.000	
NA	0.520	6.40	0.067	0.014	0.000	

B & R      K= 4.5E-03 cm/s or 12.70 ft/d  
Hvorslev K= 5.4E-03 cm/s or 15.37 ft/d

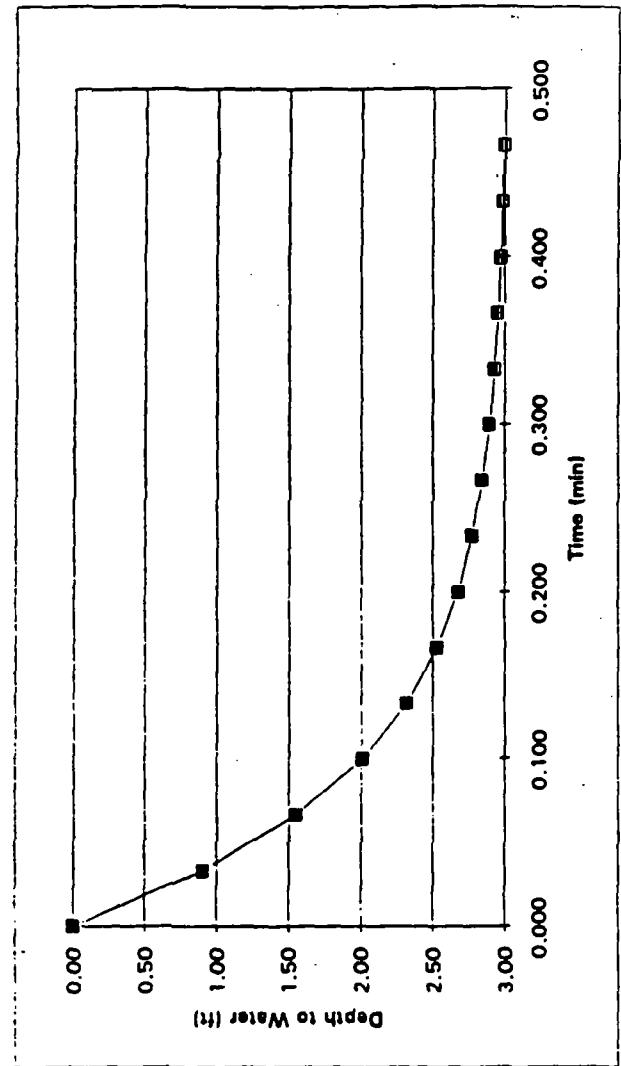


## FALLING HEAD TEST MW-12

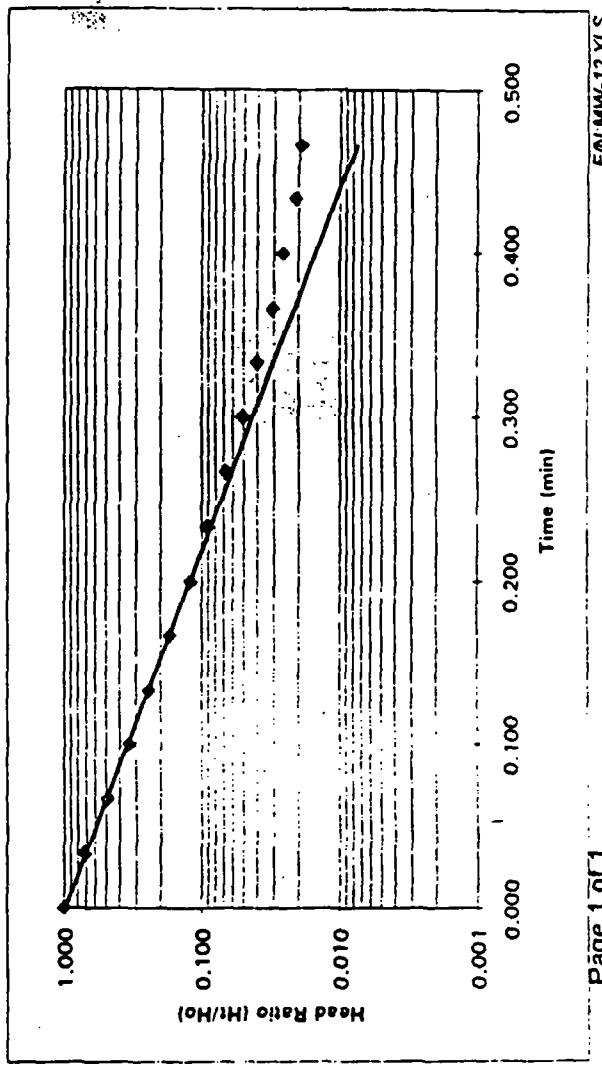
WELL ID NUMBER:	MW-12
JOB NUMBER:	943-3627
STATIC WATER DEPTH=	3.05 FT BELOW TOC
STATIC PRESSURE=	NA PSI
STANDPIPE DIAMETER=	2.00 INCHES
SCREEN DIAMETER=	6.00 INCHES
TOP OF SCREEN=	12.40 FT BELOW TOC
BOTTOM OF SCREEN=	25.00 FT BELOW TOC
AQUIFER THICKNESS=	NA or FEET

TO INDICATE BEST FIT LINE ENTER H1 AND H2

24 HOUR CLOCK (Hr-Min)	T1 Sec	ELAPSED DEPTH TO WATER (Feet)	HEAD Ratio (H/H0)	Test Interval
NA	0.000	0.00	1.000	0.000
NA	0.033	0.91	2.144	0.703
NA	0.067	1.55	1.496	0.491
NA	0.100	2.01	1.035	0.340
NA	0.133	2.32	0.731	0.240
NA	0.167	2.53	0.523	0.172
NA	0.200	2.68	0.373	0.122
NA	0.233	2.77	0.277	0.091
NA	0.267	2.84	0.206	0.067
NA	0.300	2.90	0.155	0.051
NA	0.333	2.93	0.120	0.039
NA	0.367	2.96	0.093	0.031
NA	0.400	2.97	0.079	0.026
NA	0.433	2.99	0.064	0.021
NA	0.467	2.99	0.059	0.019



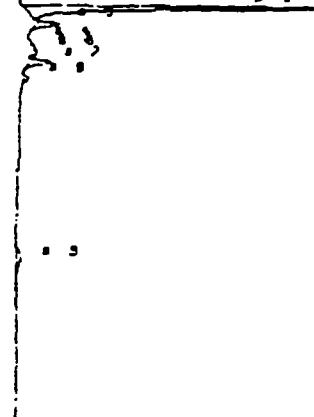
B & R K= 4.9E-03 cm/s or 13.91 ft/d  
 Hvorslev K= 5.7E-03 cm/s or 16.26 ft/d



APPENDIX  
FLUORIC CHROMATOGRAMS

# PHOTOVAC

START ..... X 1  
STOP ..... X 2



MCB

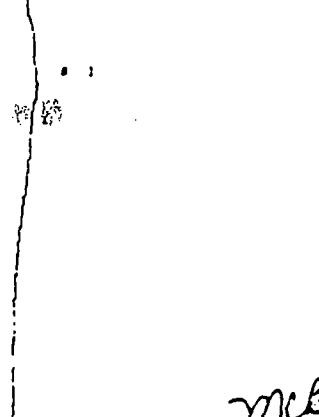
STOP 0 880.0  
SAMPLE LIBRARY 1 APR 11 1994 10:12  
ANALYSIS # 1 AIR BLANK  
INTERNAL TEMP 10  
BAIN 10 880.00 ML INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	2	42.6	6.3	US
UNKNOWN	3	65.2	451.4	MUS
UNKNOWN	3	102.2	561.2	MUS
UNKNOWN	6	152.6	151.8	MUS
UNKNOWN	8	438.6	288.0	MUS

# PHOTOVAC

START ..... X 1  
STOP ..... X 2



MCB

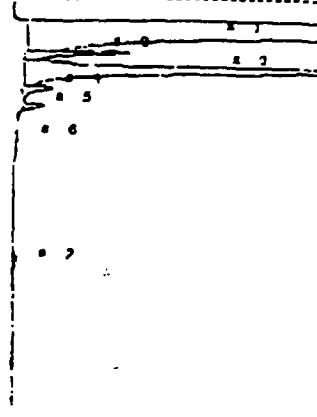
STOP 0 880.0  
SAMPLE LIBRARY 1 APR 11 1994 10:12  
ANALYSIS # 1 AIR BLANK  
INTERNAL TEMP 10  
BAIN 10 880.00 ML INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	52.3	177.1	US
UNKNOWN	2	65.3	2.5	US
UNKNOWN	3	112.6	27.2	LE
UNKNOWN	4	146.4	828.4	MUS
UNKNOWN	5	178.7	444.7	MUS
UNKNOWN	7	431.2	204.4	MUS

# PHOTOVAC

START ..... X 1  
STOP ..... X 2



MCB

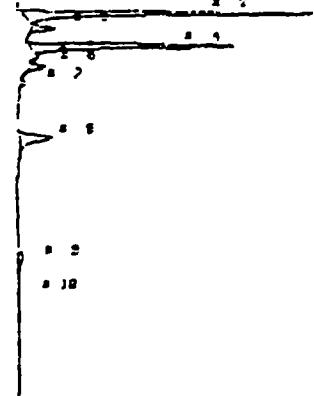
STOP 0 880.0  
SAMPLE LIBRARY 1 APR 11 1994 10:12  
ANALYSIS # 1 AIR BLANK  
INTERNAL TEMP 10  
BAIN 2 880.00 ML INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	52.3	177.1	US
UNKNOWN	2	65.3	2.5	US
UNKNOWN	3	112.6	27.2	LE
UNKNOWN	4	146.4	828.4	MUS
UNKNOWN	5	178.7	444.7	MUS
UNKNOWN	7	431.2	204.4	MUS

# PHOTOVAC

START ..... X 1  
STOP ..... X 2



MCB

STOP 0 880.0  
SAMPLE LIBRARY 1 APR 11 1994 10:12  
ANALYSIS # 2 AIR BLANK  
INTERNAL TEMP 10  
BAIN 10 880.00 ML INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	2	37.3	5.5	US
UNKNOWN	3	63.1	182.2	MUS
UNKNOWN	4	91.3	4.3	US
UNKNOWN	6	173.6	378.8	MUS
UNKNOWN	7	143.2	181.7	MUS
UNKNOWN	8	245.7	1.3	US
UNKNOWN	9	432.2	381.4	MUS

# PHOTOVAC

START ..... X 1  
STOP ..... X 2



MCB

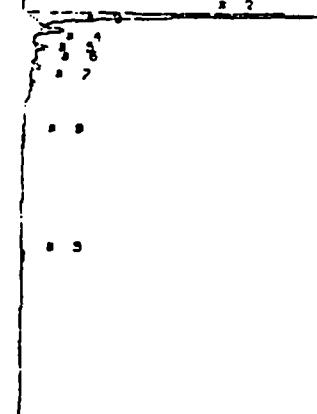
STOP 0 880.0  
SAMPLE LIBRARY 1 APR 11 1994 10:12  
ANALYSIS # 2 AIR BLANK  
INTERNAL TEMP 10  
BAIN 10 880.00 ML INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	2	37.3	5.5	US
UNKNOWN	3	63.1	182.2	MUS
UNKNOWN	4	91.3	4.3	US
UNKNOWN	6	173.6	378.8	MUS
UNKNOWN	7	143.2	181.7	MUS
UNKNOWN	8	245.7	1.3	US
UNKNOWN	9	432.2	381.4	MUS

# PHOTOVAC

START ..... X 1  
STOP ..... X 2



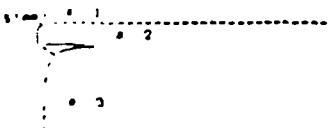
MCB

STOP 0 700.0  
SAMPLE LIBRARY 1 APR 11 1994 12:07  
ANALYSIS # 6 G1S, TRANS-DCE  
INTERNAL TEMP 10  
BAIN 10 200.00 ML INJ 500 μl

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	2	37.3	6.2	US
UNKNOWN	3	61.1	557.6	MUS
UNKNOWN	4	89.2	759.0	MUS
UNKNOWN	6	129.0	717.0	MUS
UNKNOWN	9	423.9	141.0	US

PHOTOVAC

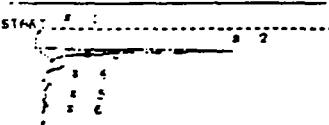


outside  
air  
MCB

STOP 6 587.1  
SAMPLE LIBRARY : APR 11 1994 12:42  
ANALYST 6 10 AIR BLANK  
INTERNAL TEMP 20  
DATE 12 500 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPT  
UNKNOWN 2 58.1 1.2 US

PHOTOVAC

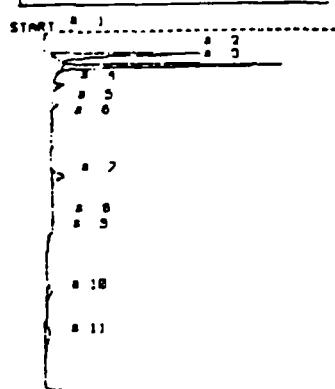


room  
air  
MCB

STOP 6 248.2  
SAMPLE LIBRARY : APR 11 1994 12:42  
ANALYST 6 10 AIR BLANK  
INTERNAL TEMP 20  
DATE 12 500 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPT  
UNKNOWN 2 52.3 3.1 US  
UNKNOWN 2 61.2 273.3 PUS  
UNKNOWN 5 128.4 100.3 PUS

PHOTOVAC



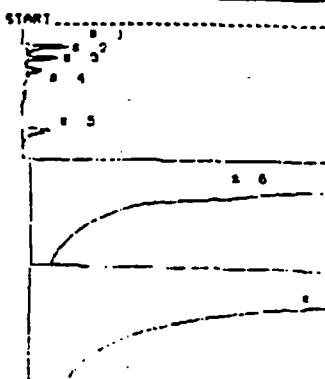
MCB

STOP 6 608.0  
SAMPLE LIBRARY : APR 11 1994 12:42  
ANALYST 6 10 PCE  
INTERNAL TEMP 20  
DATE 12 500 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPT

UNKNOWN	1	52.4	0.8 US
UNKNOWN	2	57.9	2.0 US
UNKNOWN	4	69.2	220.2 PUS
UNKNOWN	7	224.4	492.4 PUS
UNKNOWN	10	418.0	201.4 PUS
UNKNOWN	11	448.6	370.6 PUS

PHOTOVAC



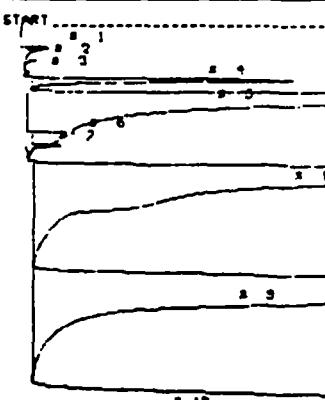
MCB

STOP 6 388.0  
SAMPLE LIBRARY : APR 11 1994 12:42  
ANALYST 6 10 PCE, TOL, TCE  
INTERNAL TEMP 20  
DATE 12 500 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPT

UNKNOWN	1	57.3	626.5 PUS
UNKNOWN	2	57.1	491.2 PUS
UNKNOWN	2	71.2	244.2 PUS
UNKNOWN	5	172.2	283.1 PUS
UNKNOWN	6	215.8	632.3 US
UNKNOWN	7	422.5	616.7 US

PHOTOVAC



MCB

STOP 6 600.0  
SAMPLE LIBRARY : APR 11 1994 12:42  
ANALYST 6 10 PCE, TOL, TCE  
INTERNAL TEMP 20  
DATE 12 500 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPT

UNKNOWN	1	52.3	666.6 PUS
UNKNOWN	2	57.1	578.2 PUS
UNKNOWN	3	75.2	300.6 PUS
UNKNOWN	4	173.2	679.8 PUS
UNKNOWN	5	234.8	112.7 PUS

STOP 6 388.0  
SAMPLE LIBRARY : APR 11 1994 12:42  
ANALYST 6 10 PCE, TOL, TCE  
INTERNAL TEMP 20  
DATE 12 500 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPT

UNKNOWN	1	36.9	135.2 PUS
UNKNOWN	4	87.4	3.1 US
UNKNOWN	5	115.4	131.4 US
UNKNOWN	6	178.7	2.3 US
UNKNOWN	7	191.2	613.2 PUS
UNKNOWN	8	232.2	312.0 US
UNKNOWN	9	416.2	464.7 US

May 1994

943-3627

TABLE D-1  
FIELD GC RESULTS  
BROCKWAY STANDARD  
HOMERVILLE, GEORGIA

	T-DCE (ppb)	C-DCE (ppb)	TCE (ppb)	TOLUENE (ppb)	PCE (ppb)	LAB?
DETECTION LIMIT	5	5	5	5	5	
LOCATION						
SOIL GAS						
SG-1	ND	ND	ND	14	ND	
SG-2	ND	ND	ND	211	ND	
SG-3	ND	ND	ND	138	ND	
SG-4	ND	ND	ND	141	ND	
SG-5	ND	ND	ND	98	ND	
SG-6	2231	6830	1849	779	647	
SOIL						
SG-1-6	ND	ND	ND	ND	ND	
SG-2-7	ND	ND	ND	12	ND	
SG-3-4	ND	ND	ND	ND	ND	
SG-4-5	ND	ND	ND	ND	ND	
SG-5-4	ND	ND	ND	ND	ND	X
SG-6-10	ND	90	8.3	ND	28	
SG-6-4	ND	6.1	ND	ND	13	X
GROUNDWATER						
SG-1-9	ND	23	6.3	ND	ND	
SG-2-7	ND	ND	ND	21	ND	
SG-3-7	ND	ND	BDL	263	ND	
SG-4-5	ND	ND	ND	ND	ND	X
SG-5-4	ND	ND	ND	ND	ND	X
SG-6-10	ND	131	44	5.2	242	X
SG-6-6A	ND	2100	42	42	120	
SG-6-6B	38	1905	36	45	76	
SURFACE WATER						
DD-1	46	ND	ND	ND	ND	X

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: Lake 2  
ACL Sample No.: 82695  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: -----  
Date Analyzed: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10-
5-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	4J	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

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TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-12  
ACL Sample No.: 82694  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: ----  
Date Analyzed: 04-27-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

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TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: DD-1  
ACL Sample No.: 82693  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: ----  
Date Analyzed: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10-
67-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
78-34-5	1,1,2,2-Tetrachloroethane	BDL	5
78-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: HP-18  
ACL Sample No.: 82692  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-18-94  
Date Extracted: ----  
Date Analyzed: 04-27-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	50
74-83-9	Bromomethane	BDL	50
75-01-4	Vinyl Chloride	724	50
75-00-3	Chloroethane	BDL	50
75-09-2	Methylene Chloride	BDL	25
67-64-1	Acetone	BDL	500
75-15-0	Carbon Disulfide	BDL	25
75-35-4	1,1-Dichloroethene	140	25
75-34-3	1,1-Dichloroethane	120	25
156-60-5	trans-1,2-Dichloroethene	12J	25
67-66-3	Chloroform	BDL	25
107-06-2	1,2-Dichloroethane	BDL	25
78-93-3	2-Butanone	BDL	500
71-55-6	1,1,1-Trichloroethane	BDL	25
56-23-5	Carbon Tetrachloride	BDL	25
108-05-4	Vinyl Acetate	BDL	250
75-27-4	Bromodichloromethane	BDL	25
78-87-5	1,2-Dichloropropane	BDL	25
10061-01-5	cis-1,3-Dichloropropene	BDL	25
79-01-6	Trichloroethene	2940	25
124-48-1	Dibromochloromethane	BDL	25
79-00-5	1,1,2-Trichloroethane	BDL	25
71-43-2	Benzene	BDL	25
10061-02-6	trans-1,3-Dichloropropene	BDL	25
75-25-2	Bromoform	BDL	25
108-10-1	4-Methyl-2-Pentanone	BDL	250
591-78-6	2-Hexanone	BDL	250
127-18-4	Tetrachloroethene	BDL	25
79-34-5	1,1,2,2-Tetrachloroethane	BDL	25
108-88-3	Toluene	BDL	25
108-90-7	Chlorobenzene	BDL	25
100-41-4	Ethylbenzene	BDL	25
100-42-5	Styrene	BDL	25
1330-20-7	Xylenes (total)	BDL	25
156-59-2	cis-1,2-Dichloroethene	4320	25

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TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: HP-17  
ACL Sample No.: 82691  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-18-94  
Date Extracted: ----  
Date Analyzed: 04-27-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	54	5
75-34-3	1,1-Dichloroethane	25	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	7	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
134-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: HP-20  
ACL Sample No.: 82690  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-18-94  
Date Extracted: -----  
Date Analyzed: 04-26-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	500
74-83-9	Bromomethane	BDL	500
75-01-4	Vinyl Chloride	BDL	500
75-00-3	Chloroethane	BDL	500
75-09-2	Methylene Chloride	BDL	250
67-64-1	Acetone	BDL	5000
75-15-0	Carbon Disulfide	BDL	250
75-35-4	1,1-Dichloroethene	BDL	250
75-34-3	1,1-Dichloroethane	BDL	250
156-60-5	trans-1,2-Dichloroethene	BDL	250
67-66-3	Chloroform	BDL	250
107-06-2	1,2-Dichloroethane	BDL	250
78-93-3	2-Butanone	1580J	5000
71-55-6	1,1,1-Trichloroethane	BDL	250
56-23-5	Carbon Tetrachloride	BDL	250
108-05-4	Vinyl Acetate	BDL	2500
75-27-4	Bromodichloromethane	BDL	250
78-87-5	1,2-Dichloropropane	BDL	250
10061-01-5	cis-1,3-Dichloropropene	BDL	250
79-01-6	Trichloroethene	BDL	250
124-48-1	Dibromochloromethane	BDL	250
79-00-5	1,1,2-Trichloroethane	BDL	250
71-43-2	Benzene	BDL	250
10061-02-6	trans-1,3-Dichloropropene	BDL	250
75-25-2	Bromoform	BDL	250
108-10-1	4-Methyl-2-Pentanone	BDL	2500
591-78-6	2-Hexanone	BDL	2500
127-18-4	Tetrachloroethene	BDL	250
79-34-5	1,1,2,2-Tetrachloroethane	BDL	250
108-88-3	Toluene	BDL	250
108-90-7	Chlorobenzene	BDL	250
100-41-4	Ethylbenzene	BDL	250
100-42-5	Styrene	BDL	250
1330-20-7	Xylenes (total)	802	250
156-59-2	cis-1,2-Dichloroethene	BDL	250

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TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Station No.: HP-9

ACL Sample No.: 82689

Matrix: Water

ACL Project No.: 15880

Date Sampled: 04-18-94

Date Extracted: ----

Date Analyzed: 04-26-94

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	131	10
75-00-3	Chloroethane	63	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	201	5
75-34-3	1,1-Dichloroethane	61	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	8	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	21	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	2J	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
9-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	94	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: HP-1  
ACL Sample No.: 82688  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-18-94  
Date Extracted: ----  
Date Analyzed: 04-25-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**

PO. BOX 88610 • ATLANTA, GEORGIA 30356

**VOLATILE ORGANICS - SW-846, METHOD 824**

REC'D. NCA PN 943-3627

TESTED DATE 04-25-94

FH 430

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

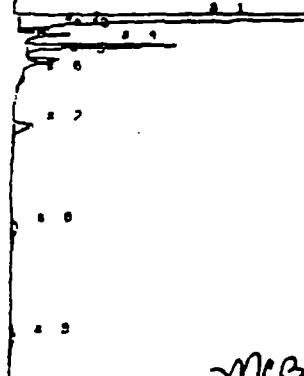
Station No.: MP-12 MAY 18 1994  
ACL Sample No.: 82687  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-18-94  
Date Extracted: ----  
Date Analyzed: 04-25-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10-
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	4J	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	37	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	20	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	99	5
156-59-2	cis-1,2-Dichloroethene	BDL	5



**PHOTOVAC**

START-----

**PHOTOVAC**

2 COMPOUND ID R.T. LIMIT

	ID	R.T.	LIMIT
INN	1	34.2	1000, PPS
T-DCE	2	29.3	1000, PPS
C-DCE	3	102.4	1000, PPS
TCE	4	212.4	1000, PPS
TOLUENE	5	225.3	1000, PPS
PCE	6	343.3	1000, PPS

m/e 3

STOP 0 621.7  
 SAMPLE LIBRARY 2 APR 22 1994 13148  
 ANALYSIS 0 10 LOW STD  
 INTERNAL TEMP 22 SOIL  
 GAIN 10 250 UL INN

COMPOUND NAME PEAK R.T. AREA/PPM

INN	1	34.2	8,000 PPM
UNKNOWN	2	34.1	231.0 PMS
UNKNOWN	3	63.3	372.2 PMS
T-DCE	4	62.8	6,728 PPM
C-DCE	5	102.2	4,182 PPM
TCE	6	212.4	4,211 PPM
UNKNOWN	7	221.3	232.3 PMS
UNKNOWN	8	343.3	285.3 PMS

**PHOTOVAC**

CALIBRATED PEAK 2,TCE

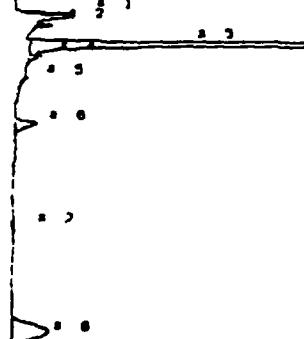
SAMPLE LIBRARY 2 APR 22 1994 13148  
 ANALYSIS 0 10 LOW STD  
 INTERNAL TEMP 21 SOIL  
 GAIN 10 250 UL INN

COMPOUND NAME PEAK R.T. AREA/PPM

INN	1	34.2	8,000 PPM
UNKNOWN	2	34.1	231.0 PMS
UNKNOWN	3	63.3	372.2 PMS
T-DCE	4	62.8	6,728 PPM
C-DCE	5	102.2	4,182 PPM
TCE	6	212.4	4,211 PPM
TOLUENE	7	221.3	162 PPM
PCE	8	343.3	2,200 PPM

**PHOTOVAC**

START-----



m/e 3

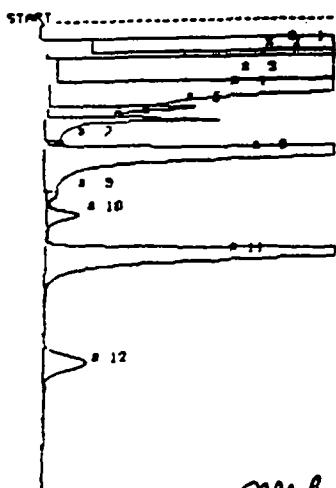
STOP 0 621.5  
 SAMPLE LIBRARY 2 APR 22 1994 1612  
 ANALYSIS 0 10 USE-1  
 INTERNAL TEMP 22 REANALYSIS  
 GAIN 10 250 UL INN

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	32.1	204.3 PMS
UNKNOWN	2	34.3	157.3 PMS
T-DCE	3	61.6	40.63 PPM
C-DCE	4	103.3	3,811 PPM
TCE	5	212.4	4,488 PPM
PCE	6	343.3	22.67 PPM

use previous  
analysis

# PHOTOVAC



STOP 8 762.1

SAMPLE LIBRARY 1 APR 22 1334 14138

ANALYSIS # 15 FLU-3A

INTERNAL TEMP 21 °C

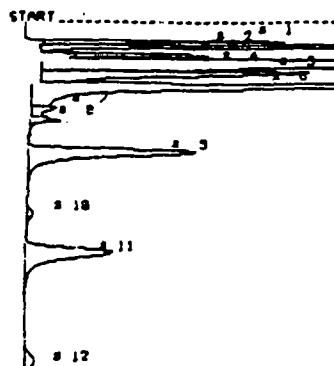
GAIN 10 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	25.8	101.3	US
UNKNOWN	2	54.9	8.7	US
T-CCE	3	76.3	63.61	PPB OS
C-DCE	4	128.1	266.8	PPB OS
UNKNOWN	5	142.8	5.3	US
UNKNOWN	6	162.2	6.2	US
UNKNOWN	7	195.2	347.1	PPB
TCE	8	213.8	287.3	PPB OS
UNKNOWN	9	226.6	668.5	PPB
UNKNOWN	10	212.3	1.8	US
TOLUENE	11	272.4	221.9	PPB OS
PCE	12	349.5	15.68	PPB

OS-offscale - use  
reanalysis results

# PHOTOVAC



STOP 8 667.1

SAMPLE LIBRARY 1 APR 22 1334 13138

ANALYSIS # 16 FLU-3A

INTERNAL TEMP 22 REANALYSIS

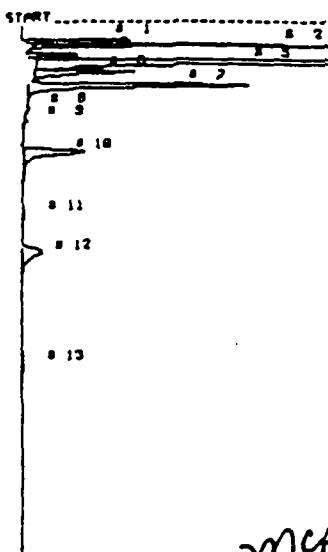
GAIN 2 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	31.9	3.2	US
UNKNOWN	2	33.6	10.8	US
UNKNOWN	3	53.3	3.2	US
UNKNOWN	4	66.3	47.8	US
T-DCE	5	82.6	104.8	PPB ←
C-DCE	6	104.1	355.8	PPB OS
UNKNOWN	7	142.0	517.5	PPB
UNKNOWN	8	162.2	664.3	PPB
TCE	9	213.8	112.1	PPB ←
UNKNOWN	10	311.5	264.1	PPB
TOLUENE	11	374.2	58.48	PPB ←
PCE	12	348.1	15.11	PPB

MCB

# PHOTOVAC



STOP 8 844.1

SAMPLE LIBRARY 1 APR 22 1334 13122

ANALYSIS # 17 FLU-3A

INTERNAL TEMP 22 REANALYSIS

GAIN 2 50 UL INJ

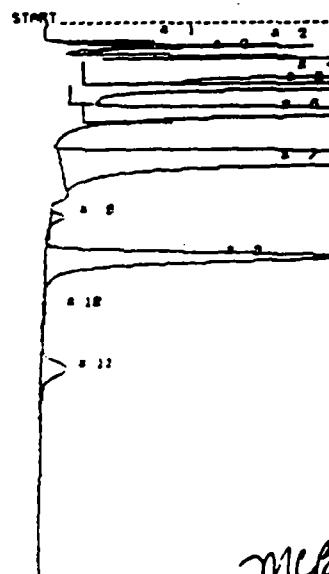
COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	31.6	230.2	PPB
UNKNOWN	2	38.9	2.7	US
UNKNOWN	3	53.9	282.2	PPB
UNKNOWN	4	56.3	357.5	PPB
UNKNOWN	5	64.3	10.8	US
T-DCE	6	82.3	23.46	PPB
C-DCE	7	104.2	186.4	PPB
TCE	8	213.8	38.83	PPB
TOLUENE	12	373.7	10.36	PPB
PCE	13	345.3	2.673	PPB

MCB

X 5

# PHOTOVAC



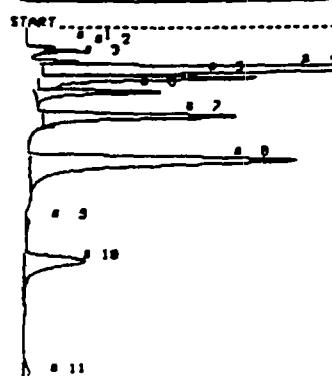
*MGB*

STOP 6 653.8  
SAMPLE LIBRARY 1 APR 22 1994 14:14  
ANALYSIS 6 13 TIC-11  
INTERNAL TEMP 21 °C  
GRIN 10 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	21.3	827.2 μUS
UNKNOWN	2	39.5	1.9 US
UNKNOWN	3	56.7	3.3 US
UNKNOWN	4	73.3	48.6 US
C-DCE	5	105.2	153.0 PPB OS
UNKNOWN	6	144.7	42.8 US
TCE	7	218.1	322.3 PPB OS
UNKNOWN	8	317.1	395.0 μUS
TOLUENE	9	329.7	67.82 PPB OS
PCE	10	357.3	6.301 PPB

OS - offscale use  
reanalysis  
results

# PHOTOVAC

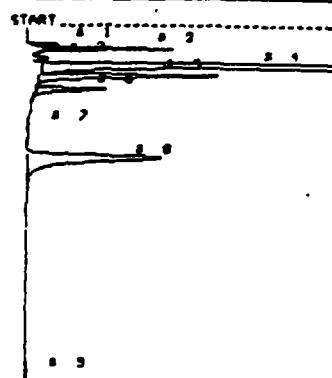


*MGB*

STOP 6 648.2  
SAMPLE LIBRARY 1 APR 22 1994 14:12  
ANALYSIS 6 13 TIC-11  
INTERNAL TEMP 21 °C  
GRIN 2 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	2	39.5	364.3 μUS
UNKNOWN	3	56.5	670.3 μUS
UNKNOWN	4	66.2	48.3 US
T-DCE	5	83.2	87.45 PPB ←
C-DCE	6	103.4	128.3 PPB ←
UNKNOWN	7	144.8	6.0 US
TCE	8	212.2	218.3 PPB ←
UNKNOWN	9	315.5	116.1 μUS
TOLUENE	10	329.2	59.32 PPB ←
PCE	11	356.5	9.114 PPB

# PHOTOVAC

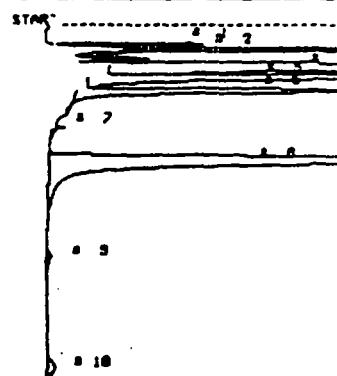


*MGB*

STOP 6 651.7  
SAMPLE LIBRARY 1 APR 22 1994 14:22  
ANALYSIS 6 13 TIC-10  
INTERNAL TEMP 21 °C  
GRIN 2 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	32.8	146.3 μUS
UNKNOWN	2	33.2	1.3 US
UNKNOWN	3	33.3	167.3 μUS
UNKNOWN	4	64.8	17.4 US
T-DCE	5	83.2	39.35 PPB ←
C-DCE	6	105.4	53.67 PPB ←
TCE	8	215.4	68.72 PPB ←

# PHOTOVAC

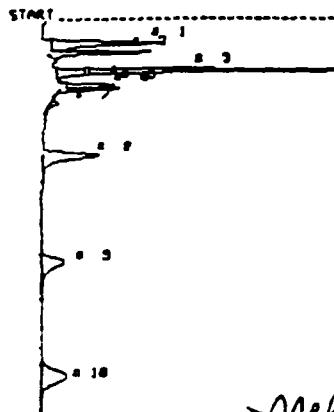


*MGB*

STOP 6 770.3  
SAMPLE LIBRARY 1 APR 22 1994 14:10  
ANALYSIS 6 14 TIC-8  
INTERNAL TEMP 21 °C  
GRIN 10 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	31.3	352.3 μUS
UNKNOWN	2	39.5	6.0 US
UNKNOWN	3	53.1	1.8 US
UNKNOWN	4	66.6	31.7 US
T-DCE	5	82.8	35.91 PPB C S
C-DCE	6	104.9	77.92 PPB C S
TCE	8	213.3	163.6 PPB ←
TOLUENE	9	327.2	8.624 PPB ←
PCE	10	356.9	2.350 PPB ←

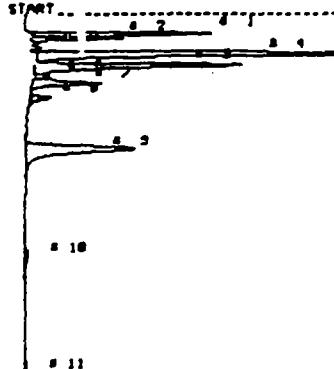
# PHOTOVAC



SAMPLE LIBRARY 1 APR 22 1994 11:13  
ANALYSIS # 7 LOW STD  
INTERNAL TEMP 21 °C  
GAIN 18 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	48.3	2.0 US
UNKNOWN	2	55.5	1.4 US
T-OCE	3	63.3	10.11 PPM
C-OCE	5	100.2	2.926 PPM
C-OCE	6	114.4	0.311 PPM
UNKNOWN	7	138.8	125.0 μUS
UNKNOWN	8	223.8	2.1 US
UNKNOWN	9	334.2	1.4 US
UNKNOWN	18	520.0	1.9 US

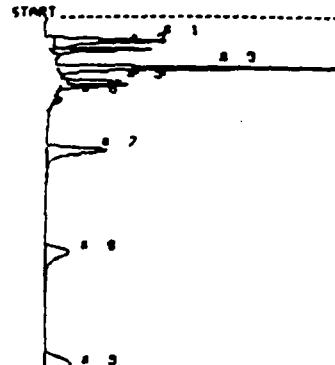
# PHOTOVAC



SAMPLE LIBRARY 1 APR 22 1994 11:14  
ANALYSIS # 8 HI-S  
INTERNAL TEMP 21 REANALYSIS  
GAIN 2 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	48.3	3.0 US
UNKNOWN	2	55.5	1.1 US
UNKNOWN	4	63.3	13.1 US
T-OCE	5	65.0	55.20 PPM ←
UNKNOWN	6	101.2	282.5 μUS
UNKNOWN	7	114.1	1.0 US
UNKNOWN	8	126.0	144.1 μUS
TCE	9	222.6	65.25 PPM ←
TOLUENE	18	331.2	2.462 PPM ←

# PHOTOVAC



SAMPLE LIBRARY 1 APR 22 1994 11:13  
ANALYSIS # 18 LOW STD  
INTERNAL TEMP 21 °C  
GAIN 18 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	48.3	2.0 US
UNKNOWN	2	54.3	1.4 US
T-OCE	3	63.3	11.03 PPM
C-OCE	4	100.3	0.133 PPM
C-OCE	5	111.2	10.15 PPM
UNKNOWN	6	135.6	162.0 μUS
TCE	7	217.8	6.682 PPM
TOLUENE	8	302.2	4.788 PPM
PCE	9	339.3	0.646 PPM

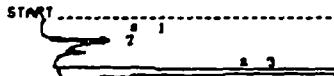
# PHOTOVAC

CALIBRATED PEAK 6.TCE

SAMPLE LIBRARY 1 APR 22 1994 11:13  
ANALYSIS # 7 LOW STD  
INTERNAL TEMP 20 °C  
GAIN 18 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	48.3	2.0 US
UNKNOWN	2	55.5	1.4 US
T-OCE	3	63.3	10.11 PPM
C-OCE	5	100.2	2.926 PPM
UNKNOWN	6	114.4	1.0 US
UNKNOWN	7	138.8	125.0 μUS
TCE	9	222.6	6.333 PPM
TOLUENE	3	334.2	1.000 PPM
PCE	18	520.0	0.329 PPM

# PHOTOVAC



# PHOTOVAC

CALIBRATED PEAK 7.TCE

SAMPLE LIBRARY 1 APR 22 1994 11:13  
ANALYSIS # 18 LOW STD  
INTERNAL TEMP 21 °C  
GAIN 18 250 UL INJ

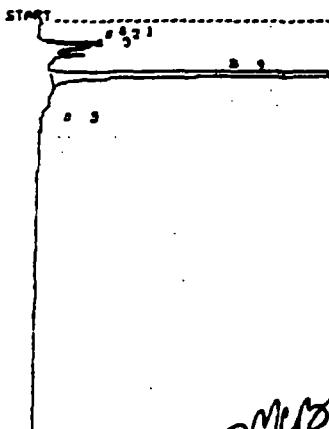
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	48.3	2.0 US
UNKNOWN	2	54.3	1.4 US
T-OCE	3	63.3	11.03 PPM
C-OCE	4	100.3	0.133 PPM
UNKNOWN	5	111.2	1.1 US
UNKNOWN	6	135.6	162.0 μUS
TCE	7	217.8	6.682 PPM
TOLUENE	8	302.2	4.788 PPM
PCE	9	339.3	0.646 PPM

STOP 6 1000.0  
SAMPLE LIBRARY 1 APR 22 1994 12:12  
ANALYSIS # 3 DD-1  
INTERNAL TEMP 21 °C  
GAIN 18 250 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	36.6	188.0 μUS
UNKNOWN	2	53.3	136.0 μUS
T-OCE	3	64.6	46.13 PPM

*McB*

# PHOTOVAC

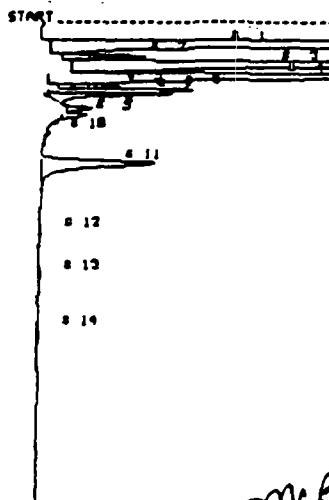


SAMPLE LIBRARY 1 APR 22 1994 10:10  
ANALYSIS # 3 TIC-12  
INTERNAL TEMP 20 °C  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPM  
INU 1 36.3 0.000 PPM  
UNKNOWN 2 56.3 352.1 MUS  
T-DCE 4 87.3 31.25 PPM

*mcb*

# PHOTOVAC

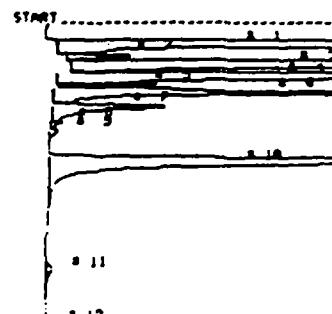


SAMPLE LIBRARY 1 APR 22 1994 10:10  
ANALYSIS # 3 TIC-12  
INTERNAL TEMP 20 °C  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPM  
INU 1 36.3 0.000 PPM  
UNKNOWN 2 57.3 2.0 US  
UNKNOWN 3 68.4 28.5 US  
T-DCE 4 87.2 45.21 PPM  
UNKNOWN 5 103.6 1.2 US  
C-DCE 6 110.6 25.67 PPM  
~~G-DCE~~ 7 146.2 21.50 PPM  
UNKNOWN 8 141.2 571.3 MUS  
UNKNOWN 9 151.6 567.2 MUS  
TCE 11 223.2 13.25 PPM  
UNKNOWN 13 489.6 125.3 MUS

*mcb*

# PHOTOVAC

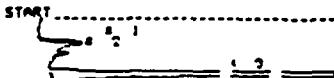


SAMPLE LIBRARY 1 APR 22 1994 11:10  
ANALYSIS # 6 TIC-3  
INTERNAL TEMP 20 °C  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPM  
INU 1 36.2 0.000 PPM  
UNKNOWN 2 56.1 1.5 US  
UNKNOWN 3 62.9 32.2 US  
T-DCE 4 86.8 36.19 PPM OS  
UNKNOWN 5 102.7 1.5 US  
C-DCE 6 114.6 35.37 PPM OS  
UNKNOWN 7 148.4 3.2 US  
UNKNOWN 8 164.7 278.9 MUS  
UNKNOWN 9 179.2 330.2 MUS  
UNKNOWN 10 221.9 37.9 US  
UNKNOWN 11 339.7 339.2 MUS

*mcb*  
OS - offscale  
use reanalysis  
results

# PHOTOVAC



SAMPLE LIBRARY 1 APR 22 1994 10:40  
ANALYSIS # 4 TIC-7  
INTERNAL TEMP 20 °C  
GAIN 10 250 UL INU

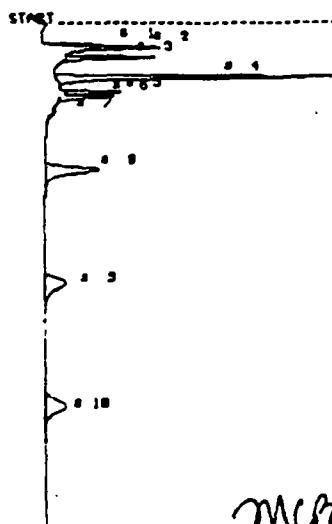
COMPOUND NAME PEAK R.T. AREA/PPM  
INU 1 36.1 0.000 PPM  
UNKNOWN 2 56.3 146.1 MUS  
T-DCE 3 87.1 32.03 PPM

*mcb*

**PHOTOVAC**

	COMPOUND	ID #	R.T.	AREA
1	INJ	1	32.1	1000. P.P.B
2	T-DCE	2	62.1	1000. P.P.B
3	C-DCE	3	107.0	1000. P.P.B
4	TCE	4	222.0	1000. P.P.B
5	TOLUENE	5	424.0	1000. P.P.B
6	PCE	6	570.0	1000. P.P.B

**PHOTOVAC**



**PHOTOVAC**

	COMPOUND	ID #	R.T.	AREA
1	INJ	1	32.0	1000. P.P.B
2	T-DCE	2	62.0	1000. P.P.B
3	C-DCE	3	110.5	1000. P.P.B
4	TCE	4	228.0	1000. P.P.B
5	TOLUENE	5	424.0	1000. P.P.B
6	PCE	6	521.0	1000. P.P.B

**PHOTOVAC**

START 6 1 2

STOP 6 662.3

SAMPLE LIBRARY 1 APR 22 1994 3156

ANALYSIS 4 1 USE-1

INTERNAL TEMP 21 REANALYSIS

GAIN 10 750 UL INJ

2 MCRA

COMPOUND NAME PEAK R.T. AREA/P.P.M

UNKNOWN	1	41.1	1.2 US
T-DCE	2	62.0	36.12 P.P.B
TCE	3	229.2	1.286 P.P.B
TOLUENE	4	582.2	9.572 P.P.B
PCE	5	566.0	5.636 P.P.B

**PHOTOVAC**

CALIBRATED PEAK 6.1CE

SAMPLE LIBRARY 1 APR 22 1994 3156

ANALYSIS 4 1 LOW STD

INTERNAL TEMP 19

GAIN 10 250 UL INJ

2 MCRA

COMPOUND NAME PEAK R.T. AREA/P.P.M

INJ	1	32.1	0.800 P.P.B
UNKNOWN	2	42.0	886.9 MUS
UNKNOWN	3	57.2	1.1 US
T-DCE	4	69.0	10.00 P.P.B
C-DCE	5	114.2	0.756 P.P.B
UNKNOWN	6	121.2	332.2 MUS
TCE	8	238.0	0.685 P.P.B
TOLUENE	9	424.0	4.352 P.P.B
PCE	10	522.0	0.279 P.P.B

**PHOTOVAC**

START 6 2 3

STOP 6 662.3

SAMPLE LIBRARY 1 APR 22 1994 18115

ANALYSIS 4 2 PRODUCTION WELL

INTERNAL TEMP 20

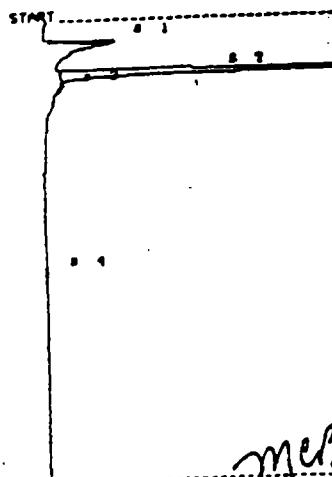
GAIN 10 250 UL INJ

2 MCRA

COMPOUND NAME PEAK R.T. AREA/P.P.M

INJ	1	32.1	0.800 P.P.B
UNKNOWN	2	57.5	348.0 MUS
T-DCE	3	68.0	31.62 P.P.B

# PHOTOVAC

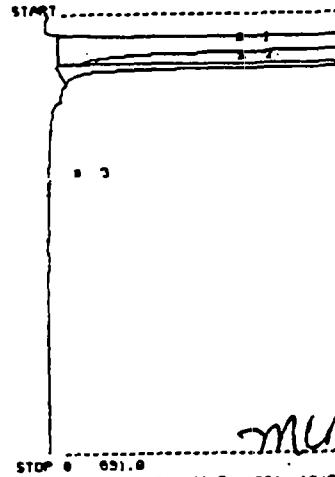


*methyl*

STOP 0 722.1  
SAMPLE LIBRARY 2 APR 21 1994 18:15:4  
ANALYSIS # 2 USE-3  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INU	1	36.0 8.000 PPM
T-DCE	2	85.0 30.91 PPM

# PHOTOVAC

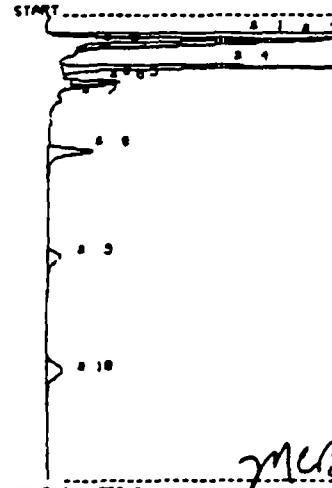


*methyl*

STOP 0 631.0  
SAMPLE LIBRARY 2 APR 21 1994 18:12:2  
ANALYSIS # 3 USE-3  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	48.1 119.3 US
UNKNOWN	2	85.0 12.5 US

# PHOTOVAC

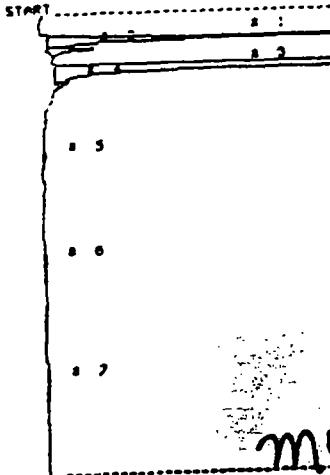


*methyl*

STOP 0 732.2  
SAMPLE LIBRARY 2 APR 21 1994 18:13:2  
ANALYSIS # 10 LOW STD  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	33.7 8.2 US
UNKNOWN	4	84.7 5.1 US
UNKNOWN	5	186.4 347.8 PUS
C-DCE	6	113.0 2.832 PPM
UNKNOWN	8	272.0 1.5 US
UNKNOWN	9	339.2 884.6 PUS
UNKNOWN	10	571.0 1.1 US

# PHOTOVAC



*methyl*

STOP 0 722.1  
SAMPLE LIBRARY 2 APR 21 1994 18:10:0  
ANALYSIS # 4 USE-3  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	41.0 3.4 US
UNKNOWN	2	50.1 250.0 PUS
T-DCE	3	85.0 64.26 PPM
UNKNOWN	4	185.0 180.3 PUS

# PHOTOVAC

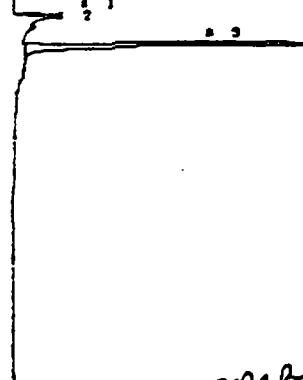
## CALIBRATED PEAK 6-TCE

SAMPLE LIBRARY 2 APR 21 1994 18:10:0  
ANALYSIS # 10 LOW STD  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INU	1	33.2 8.000 PPM
T-DCE	4	84.7 14.00 PPM
C-DCE	5	186.4 15.10 PPM
UNKNOWN	6	113.0 320.4 PUS
TCE	8	272.0 18.28 PPM
TOLUENE	9	339.2 8.751 PPM
PCE	10	571.0 3.050 PPM

**PHOTOVAC**

START ..... 1 2 3



mcb

STOP 0 810.1  
SAMPLE LIBRARY 2 APR 21 1994 10151  
ANALYSIS # 3 VGS-6  
INTERNAL TEMP 29 SOIL  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPB

INJ	1	38.5 8.008 PPB
T-DCE	3	68.6 18.38 PPB

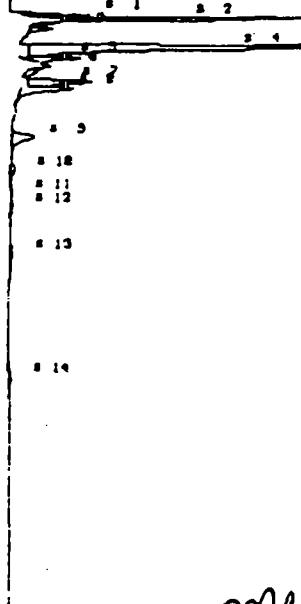
**PHOTOVAC**

2 COMPOUND ID # R.T. AREA/PPB

INJ	1	38.5 8.008 PPB
T-DCE	2	68.6 18.38 PPB
C-DCE	3	112.4 1822. PPB
TCE	4	223.8 1822. PPB
TOLUENE	5	453.5 1822. PPB
PCE	6	603.5 1822. PPB

**PHOTOVAC**

START ..... 1 2 3 4



mcb

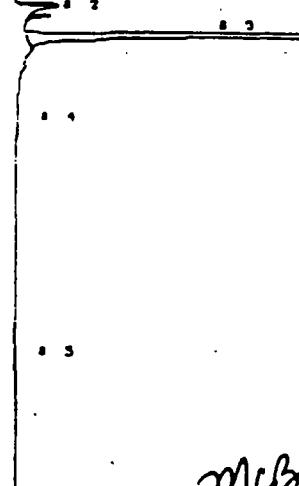
STOP 0 1200.0  
SAMPLE LIBRARY 2 APR 21 1994 12126  
ANALYSIS # 4 VGS-6  
INTERNAL TEMP 29 SOIL  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPB

UNKNOWN	1	33.2 569.3 uUS
UNKNOWN	2	42.3 2.9 uS
UNKNOWN	3	52.5 342.9 uUS
T-DCE	4	68.3 45.83 PPB
UNKNOWN	5	106.6 626.8 uUS
UNKNOWN	7	145.6 1.3 uS
UNKNOWN	8	155.6 1.4 uS
TCE	9	223.8 5.493 PPB
UNKNOWN	10	268.3 172.4 uUS
TOLUENE	11	412.9 2.084 PPB

**PHOTOVAC**

START ..... 1 2 3



mcb

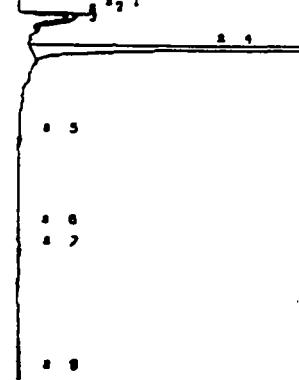
STOP 0 814.4  
SAMPLE LIBRARY 2 APR 21 1994 12126  
ANALYSIS # 5 VGS-6  
INTERNAL TEMP 29 SOIL  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPB

INJ	1	38.4 8.008 PPB
UNKNOWN	2	56.5 234.5 uUS
T-DCE	3	67.3 48.57 PPB

**PHOTOVAC**

START ..... 1 2 3



mcb

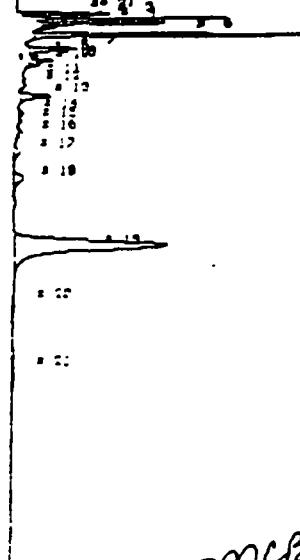
STOP 0 781.5  
SAMPLE LIBRARY 2 APR 21 1994 12148  
ANALYSIS # 6 VGS-6  
INTERNAL TEMP 29 SOIL  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPB

UNKNOWN	1	32.5 385.2 uUS
T-DCE	4	68.3 43.66 PPB
TOLUENE	7	104.7 1.234 PPB

**PHOTOVAC**

START 8:21:3



STOP 8:314.9  
SAMPLE LIBRARY 1 APR 21 1994 16:24  
ANALYSIS # 15 NM-2  
INTERNAL TEMP 28 LMPL  
GAIN 10 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 32.2 530.1 μRS  
UNKNOWN 2 34.6 381.4 μRS  
UNKNOWN 3 42.9 1.3 US  
UNKNOWN 4 48.9 1.1 US  
UNKNOWN 5 55.5 120.5 μRS  
UNKNOWN 6 60.9 3.9 US  
T-DCE 7 21.3 2.844 PPB  
UNKNOWN 8 103.6 102.0 μRS  
C-DCE 9 12.5 2.425 PPB  
C-DCE 10 44.8 407.000 μRS *mcs*  
UNKNOWN 11 178.1 710.5 μRS  
TCE 12 238.4 0.413 PPB  
UNKNOWN 13 268.5 177.3 μRS  
UNKNOWN 14 301.9 395.5 μRS  
TOLLENE 15 428.8 39.72 PPB

X 10

**PHOTOVAC**

START 8:21:3

COMPOUND	ID #	R.T.	AREA
INJ	1	32.2	1000. PPB
T-DCE	2	68.8	1000. PPB
C-DCE	3	115.3	1000. PPB
TCE	4	238.8	1000. PPB
TOLLENE	5	424.8	1000. PPB
PCB	6	622.3	1000. PPB

**PHOTOVAC**

START 8:21:3



*mcs*

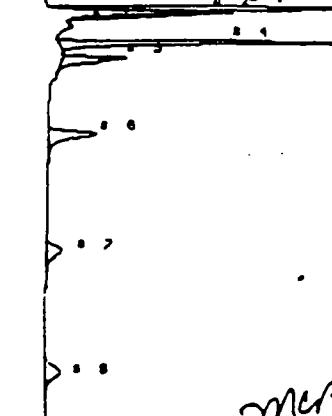
STOP 8:234.9  
SAMPLE LIBRARY 1 APR 21 1994 16:24  
ANALYSIS # 1 AIR BLANK  
INTERNAL TEMP 10  
GAIN 10 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 63.3 437.6 μRS

*mcs*

**PHOTOVAC**

START 8:21:3



*mcs*

STOP 8:652.3  
SAMPLE LIBRARY 2 APR 21 1994 16:24  
ANALYSIS # 2 LOW STD  
INTERNAL TEMP 10 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	33.3 8.000 PPB
UNKNOWN	4	63.4 6.4 US
UNKNOWN	5	115.3 1.0 US
UNKNOWN	6	233.5 2.0 US
UNKNOWN	7	423.6 1.0 US
UNKNOWN	8	622.3 1.0 US

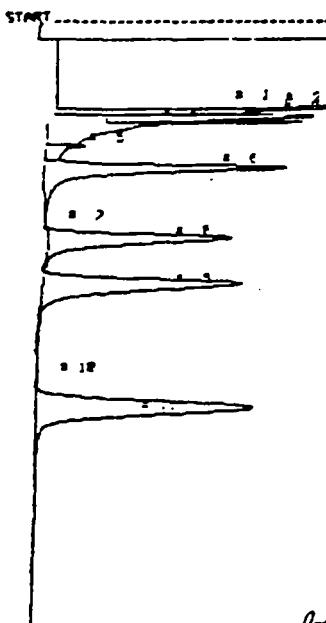
**PHOTOVAC**

CALIBRATED PEAK 8:TCE

SAMPLE LIBRARY 2 APR 21 1994 16:24  
ANALYSIS # 2 LOW STD  
INTERNAL TEMP 10 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	33.3 5.2 US
T-DCE	4	63.4 18.51 PPB
C-DCE	5	115.3 26.12 PPB
TCE	6	233.5 13.36 PPB
TOLLENE	7	423.6 11.05 PPB
PCB	8	622.3 8.160 PPB

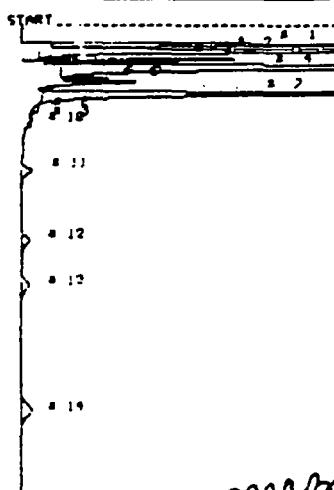
PHOTOVAC



STOP 0 1000.0  
SAMPLE LIBRARY 1 APR 18 1334 3128  
ANALYSIS 0 42 50-0-00  
INTERNAL TEMP 10 0U  
GAIN 10 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 24.2 2.5 MUS  
UNKNOWN 2 145.2 6.7 MUS  
UNKNOWN 3 156.4 3.1 MUS  
UNKNOWN 4 166.7 8.8 MUS  
UNKNOWN 5 284.8 1.6 MUS  
TCE 6 236.2 34.39 PPB  
UNKNOWN 8 352.8 12.6 MUS  
TOLUENE 9 424.5 \*\*.58 PPB  
PCE 11 623.3 76.14 PPB

PHOTOVAC

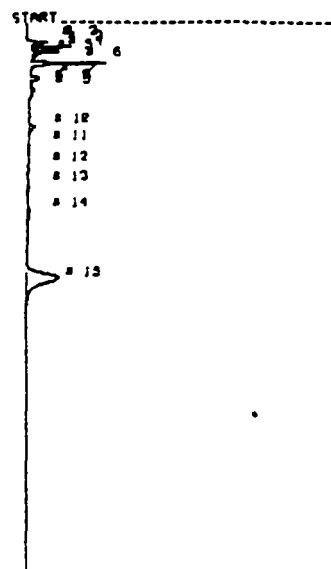


STOP 0 225.6  
SAMPLE LIBRARY 1 APR 18 1334 3148  
ANALYSIS 0 43 50-0-00  
INTERNAL TEMP 10 REANALYSIS  
GAIN 2 50 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 32.9 2.3 MUS  
UNKNOWN 2 47.2 16.8 MUS  
UNKNOWN 3 56.5 2.1 MUS  
UNKNOWN 4 65.1 23.8 MUS  
T-DCE 5 86.3 2.626 PPB ←  
C-DCE 6 93.1 17.607 PPB → mcB  
C-DCE 7 112.2 381.3 PPB ←  
TCE 11 237.8 3.413 PPB  
UNKNOWN 12 359.2 376.4 MUS  
TOLUENE 13 422.3 2.801 PPB  
PCE 14 628.7 16.58 PPB

X5

PHOTOVAC



STOP 0 1000.0  
SAMPLE LIBRARY 1 APR 18 1334 10125  
ANALYSIS 0 44 50-0-00  
INTERNAL TEMP 20 LAMP  
GAIN 2 50 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 3 41.1 244.3 MUS  
UNKNOWN 4 49.1 221.0 MUS  
UNKNOWN 6 67.2 689.4 MUS  
T-DCE 7 92.5 1.676 PPB  
UNKNOWN 10 122.2 118.8 MUS  
TOLUENE 13 412.4 38.34 PPB

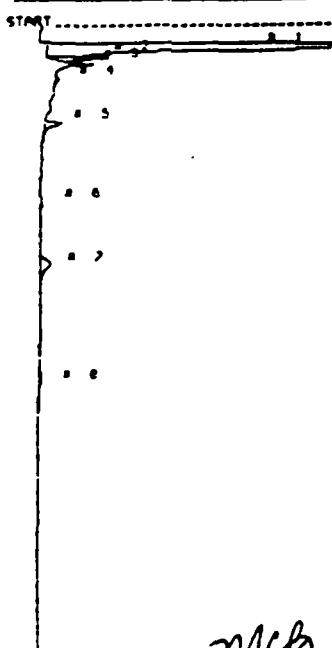
PHOTOVAC

SAMPLE LIBRARY 1 APR 18 1334 10127  
ANALYSIS 0 44 50-0-00  
INTERNAL TEMP 20 LAMP  
GAIN 2 25 UL INJ

COMPOUND NAME PEAK R.T./ AREA/PPM  
UNKNOWN 3 41.1 244.3 MUS  
UNKNOWN 4 49.1 221.0 MUS  
UNKNOWN 6 67.2 689.4 MUS  
T-DCE 7 92.5 1.676 PPB  
UNKNOWN 10 122.2 118.8 MUS  
TOLUENE 13 412.4 38.34 PPB

X10

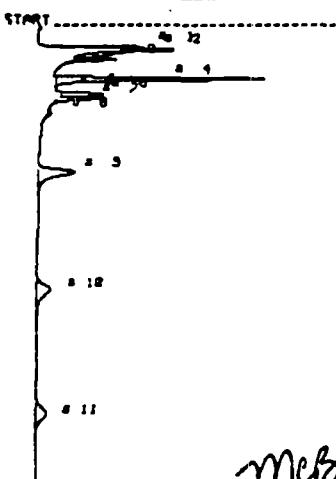
# PHOTOVAC



STOP 8 1882.2  
SAMPLE LIBRARY 1 APR 17 1994 01:50  
ANALYSIS # 40 SD-9-9  
INTERNAL TEMP 19 °C  
BAIN 10 250 uL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	26.5	15.2 US
UNKNOWN	2	24.3	838.2 uVS
UNKNOWN	3	64.5	263.5 uVS
UNKNOWN	4	162.2	423.1 uVS
TOLUENE	5	282.1	1.943 PPB
PCP	6	625.8	0.742 PPB

# PHOTOVAC



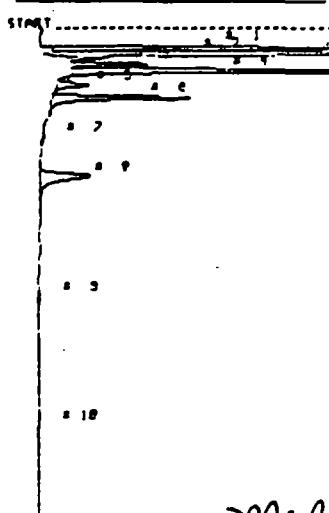
STOP 8 723.2  
SAMPLE LIBRARY 1 APR 18 1994 01:50  
ANALYSIS # 40 LOW STD  
INTERNAL TEMP 19 °C WATER  
BAIN 10 250 uL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	36.8	383.8 uVS
UNKNOWN	2	41.3	235.3 uVS
UNKNOWN	3	57.3	548.7 uVS
UNKNOWN	4	83.2	3.4 US
UNKNOWN	6	114.1	700.1 uVS
UNKNOWN	7	128.4	822.8 uVS
UNKNOWN	9	238.8	1.3 US
UNKNOWN	10	425.6	848.7 uVS
UNKNOWN	11	625.5	766.8 uVS

# PHOTOVAC

COMPOUND	ID #	R.T.	LIMIT
INJ	1	32.3	1000. PPM
T-OCE	2	60.8	1000. PPM
C-OCE	3	115.3	1000. PPM
TCE	4	728.8	1000. PPM
TOLUENE	5	424.8	1000. PPM
PCP	6	625.5	1000. PPM

# PHOTOVAC



STOP 8 730.2  
SAMPLE LIBRARY 1 APR 18 1994 01:50  
ANALYSIS # 41 SD-1-3  
INTERNAL TEMP 19 °C  
BAIN 10 250 uL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	32.3	3.3 US
UNKNOWN	2	41.1	9.3 US
UNKNOWN	3	55.7	1.0 US
UNKNOWN	4	68.8	11.0 US
UNKNOWN	5	93.2	203.0 uVS
C-OCE	6	113.8	23.20 PPB
TCE	8	238.8	6.237 PPB

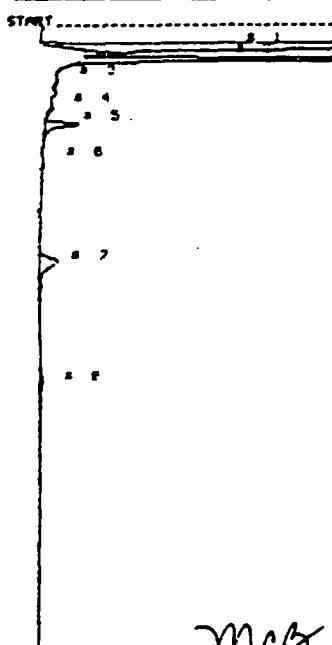
# PHOTOVAC

CALIBRATED PEAK 9-TCE

SAMPLE LIBRARY 1 APR 18 1994 01:51  
ANALYSIS # 40 LOW STD  
INTERNAL TEMP 19 °C WATER  
BAIN 10 250 uL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INJ	1	36.8	8,000 PPM
UNKNOWN	2	41.3	235.3 uVS
UNKNOWN	3	57.3	548.7 uVS
T-OCE	4	83.2	2,044 PPB
C-OCE	6	114.1	6,043 PPB
UNKNOWN	7	128.4	822.8 uVS
TCE	9	238.8	4,231 PPB
TOLUENE	10	425.6	2,823 PPB
PCP	11	625.5	3,274 PPB

PHOTOVAC

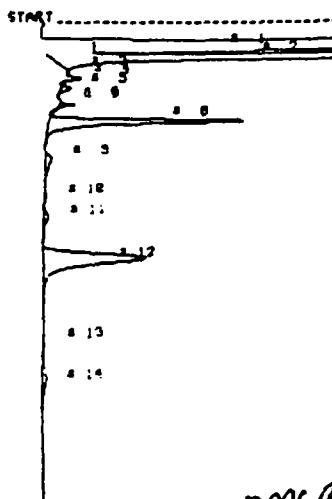


*MCB*

STOP 0 1802.0  
SAMPLE LIBRARY 2 APR 17 1334 16:50  
ANALYSIS # 34 SO-2-2  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1 25.4	0.002 PPM
UNKNOWN	2 56.2	0.8 US
UNKNOWN	3 102.7	500.0 PUS
TOLUENE	7 382.2	11.62 PPM
PCE	8 524.3	1.531 PPM

PHOTOVAC

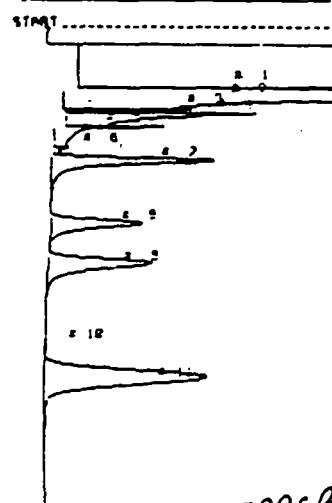


*MCB*

STOP 0 229.4  
SAMPLE LIBRARY 1 APR 17 1334 17:54  
ANALYSIS # 34 SO-2-2  
INTERNAL TEMP 21 SO  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1 38.1	78.3 US
UNKNOWN	2 56.3	20.9 US
UNKNOWN	4 99.1	191.8 PUS
C-DCE	5 188.1	2.259 PPM
UNKNOWN	7 136.8	114.6 PUS
UNKNOWN	8 162.2	3.5 US
TCE	9 224.4	1.961 PPM
UNKNOWN	11 218.5	233.3 PUS
TOLUENE	12 386.2	21.03 PPM
PCE	14 577.3	1.328 PPM

PHOTOVAC



*MCB*

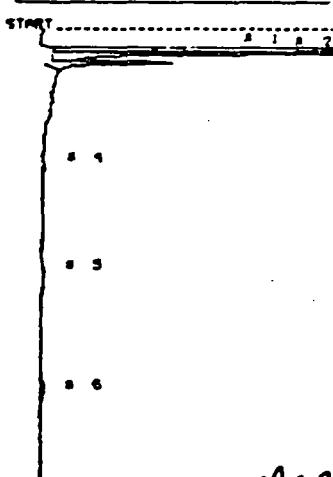
STOP 0 2557.7  
SAMPLE LIBRARY 1 APR 17 1334 18:17  
ANALYSIS # 37 SO-2-2A  
INTERNAL TEMP 21 SO  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1 63.3	1.8 KUS
C-DCE	2 189.3	232.6 PPM G5
UNKNOWN	3 132.6	2.7 US
UNKNOWN	4 142.4	6.3 US
UNKNOWN	5 163.2	3.2 US
UNKNOWN	6 197.2	233.8 PUS
TCE	7 219.8	28.65 PPM
UNKNOWN	8 229.5	4.7 US
TOLUENE	9 385.2	28.34 PPM
PCE	11 565.3	68.24 PPM

X 2

05 - offscale - use  
reanalysis results

PHOTOVAC

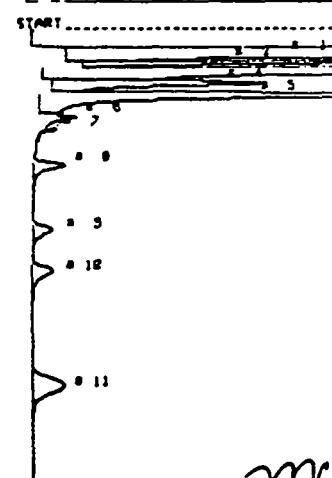


*MCB*

STOP 0 241.1  
SAMPLE LIBRARY 2 APR 17 1334 17:28  
ANALYSIS # 33 SO-2-2  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1 32.2	18.4 US
UNKNOWN	2 33.3	9.1 US
UNKNOWN	3 33.1	1.3 US
PCE	6 521.9	1.363 PPM

PHOTOVAC



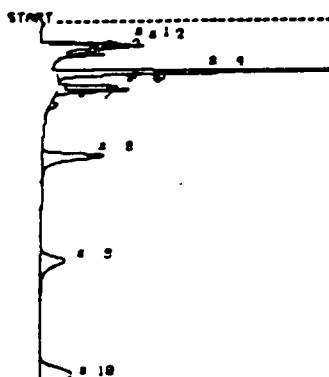
*MCB*

STOP 0 216.6  
SAMPLE LIBRARY 1 APR 17 1334 18:23  
ANALYSIS # 38 SO-2-2A  
INTERNAL TEMP 21 SO Reanalysis  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1 38.1	81.6 US
UNKNOWN	2 54.2	6.6 US
UNKNOWN	3 66.3	35.7 US
UNKNOWN	4 89.3	8.4 US
C-DCE	5 188.1	1.853 PPM
UNKNOWN	6 142.4	129.3 PUS
TCE	8 219.8	16.58 PPM
UNKNOWN	9 321.4	531.1 PUS
TOLUENE	10 386.2	19.58 PPM
PCE	11 566.6	96.36 PPM

X 2

**PHOTOVAC**

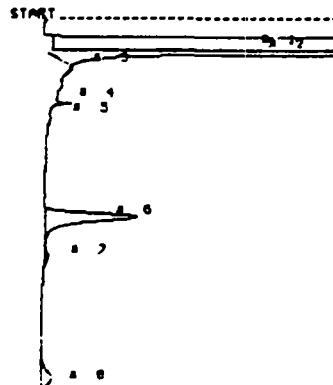


SAMPLE LIBRARY 1 APR 17 1994 15:12  
ANALYSIS # 38 LOW STD  
INTERNAL TEMP 21 WATER  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	35.2 8.000 PPM
UNKNOWN	2	48.3 285.5 PUS
UNKNOWN	3	54.2 485.1 PUS
T-OCE	4	62.4 18.68 PPM
C-OCE	5	126.3 8.466 PPM
C-OCE	6	131.7 11.12 PPM
UNKNOWN	7	135.6 124.5 PUS
TCE	8	215.6 6.222 PPM
TOLUENE	9	282.2 4.988 PPM
PCE	10	368.3 11.18 PPM

*MCB*

**PHOTOVAC**

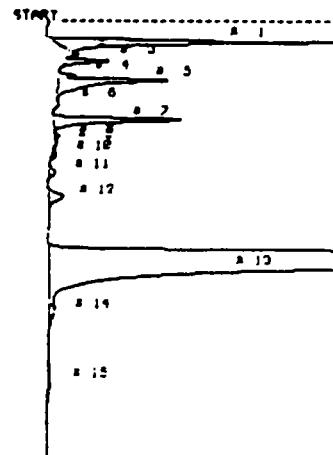


SAMPLE LIBRARY 1 APR 17 1994 15:12  
ANALYSIS # 31 SG-4-3  
INTERNAL TEMP 21 DU  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	48.2 132.5 US
UNKNOWN	2	55.6 2.7 US
UNKNOWN	4	136.4 185.6 PUS
UNKNOWN	6	321.4 4.8 US
TOLUENE	7	365.2 8.772 PPM
PCE	8	368.3 3.922 PPM

*MCB*

**PHOTOVAC**



SAMPLE LIBRARY 1 APR 17 1994 16:14  
ANALYSIS # 32 SG-3-2  
INTERNAL TEMP 21 DU  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	35.5 8.000 PPM
UNKNOWN	3	65.5 728.8 PUS
UNKNOWN	4	59.1 235.8 PUS
UNKNOWN	5	57.9 3.2 US
UNKNOWN	7	163.2 3.4 US
TCE	10	215.6 8.318 PPM
UNKNOWN	11	242.3 245.5 PUS
UNKNOWN	12	282.9 706.5 PUS
TOLUENE	13	386.6 602.6 PPM OS
UNKNOWN	14	462.6 394.7 PUS
PCE	15	575.8 1.743 PPM

*MCB*

OS - offscale - use  
reanalysis results

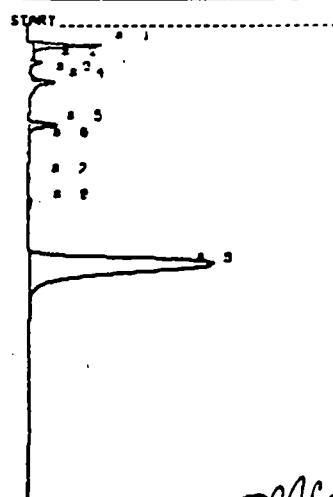
**PHOTOVAC**

CALIBRATED PEAK 0. TCE

SAMPLE LIBRARY 1 APR 17 1994 15:13  
ANALYSIS # 38 LOW STD  
INTERNAL TEMP 21 WATER  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	35.2 8.000 PPM
UNKNOWN	2	48.3 285.5 PUS
UNKNOWN	3	54.2 485.1 PUS
T-OCE	4	62.4 18.68 PPM
C-OCE	5	126.3 8.466 PPM
UNKNOWN	6	131.7 11.12 PPM
UNKNOWN	7	135.6 124.5 PUS
TCE	8	215.6 6.222 PPM
TOLUENE	9	282.2 4.988 PPM
PCE	10	368.3 11.18 PPM

**PHOTOVAC**



SAMPLE LIBRARY 1 APR 17 1994 16:19  
ANALYSIS # 30 SG-3-2  
INTERNAL TEMP 21 REANALYSIS  
GAIN 2 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	35.8 8.000 PPM
UNKNOWN	2	65.7 114.9 ~-~
UNKNOWN	4	57.9 373.6 ~-~
UNKNOWN	5	102.2 721.2 ~-~
TOLUENE	6	282.9 149.4 ~-~
TCE	7	386.2 262.2 ~-~

*MCB*

**PHOTOVAC**

2 COMPOUND ID & R.T. LIMIT

INU	1	34.6	1000.	PPB
T-DCE	2	51.7	1000.	PPB
C-DCE	3	106.4	1000.	PPB
TCE	4	222.3	1000.	PPB
TOLLENE	5	328.9	1000.	PPB
PCE	6	572.1	1000.	PPB

**PHOTOVAC**

START-----

# 3  
# 4  
# 5  
# 6  
# 7  
# 8  
# 9

*MCB*

STOP # 1000.0  
SAMPLE LIBRARY 2 APR 17 1994 12:13:46  
ANALYSIS # 22 SG-3-5  
INTERNAL TEMP 20 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB

UNKNOWN	1	28.7	42.3	US
UNKNOWN	2	55.1	1.0	US
UNKNOWN	6	328.5	1.5	US
PCE	8	322.3	2.872	PPB

**PHOTOVAC**

START-----

# 3  
# 4  
# 5  
# 6  
# 7  
# 8  
# 9

*MCB*

STOP # 1000.0  
SAMPLE LIBRARY 2 APR 17 1994 14:1:5  
ANALYSIS # 23 SG-3-4  
INTERNAL TEMP 21 REANALYSIS  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB

INU	1	35.5	8.900	PPB
UNKNOWN	2	54.7	630.5	PPB
UNKNOWN	5	162.2	286.4	PPB
TOLLENE	6	305.2	3.732	PPB
PCE	9	369.8	1.458	PPB

*MCB*

STOP # 261.3  
SAMPLE LIBRARY 2 APR 17 1994 12:11:2  
ANALYSIS # 20 SG-3-4  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB

UNKNOWN	1	36.6	13.2	US
UNKNOWN	2	54.9	1.0	US
TOLLENE	6	367.2	1.228	PPB
PCE	10	572.0	2.212	PPB

**PHOTOVAC**

START-----

# 3  
# 4  
# 5  
# 6  
# 7  
# 8  
# 9

*MCB*

STOP # 667.0  
SAMPLE LIBRARY 2 APR 17 1994 13:45:1  
ANALYSIS # 29 SG-3-4  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB

INU	1	35.6	8.900	PPB
UNKNOWN	2	34.3	612.7	PPB
UNKNOWN	5	162.2	219.4	PPB
TOLLENE	6	305.2	4.672	PPB
PCE	9	369.8	1.347	PPB

# PHOTOVAC

COMPOUND ID # R.T. AREA/PPB

INN	1	34.3	1822. PPB
T-DCE	2	56.1	1000. PPB
C-DCE	3	104.1	1000. PPB
TCE	4	124.4	1222. PPB
TOLUENE	5	155.1	1822. PPB
PCE	6	383.2	1700. PPB

# PHOTOVAC

START.....

A handwritten note "MCB" is written next to the chromatogram.

STOP 8 1820.8  
SAMPLE LIBRARY 1 APR 17 1994 11:12  
ANALYSIS # 23 100-0-10  
INTERNAL TEMP 23 °C  
GAIN 10 250 UL INN

COMPOUND NAME PEAK R.T. AREA/PPB

UNKNOWN	1	38.0	93.7 US
UNKNOWN	2	58.0	10.0 US
UNKNOWN	3	70.3	95.4 US
C-DCE	4	107.2	100.0 PPB OS
UNKNOWN	5	110.0	725.1 PPB
TCE	6	221.3	57.18 PPB OS
UNKNOWN	9	370.0	2.0 US
TOLUENE	10	394.2	5.272 PPB
PCE	11	570.2	790.8 PPB OS

OS - offscale - use  
reanalysis  
results

# PHOTOVAC

START.....

A handwritten note "MCB" is written next to the chromatogram.

STOP 8 316.9  
SAMPLE LIBRARY 1 APR 17 1994 11:12  
ANALYSIS # 24 100-0-10  
INTERNAL TEMP 23 °C  
GAIN 2 250 UL INN

COMPOUND NAME PEAK R.T. AREA/PPB

UNKNOWN	1	36.2	54.4 US
UNKNOWN	2	56.2	3.2 US
UNKNOWN	3	62.0	38.4 US
UNKNOWN	4	68.9	3.2 US
C-DCE	5	102.2	131.2 PPB ←
UNKNOWN	6	146.0	151.0 MUS
TCE	7	221.4	44.85 PPB ←
UNKNOWN	9	325.0	625.0 MUS
TOLUENE	10	391.2	5.210 PPB
PCE	11	524.3	241.6 PPB ←

# PHOTOVAC

START.....

A handwritten note "MCB" is written next to the chromatogram.

STOP 8 316.9  
SAMPLE LIBRARY 2 APR 17 1994 11:12  
ANALYSIS # 25 LOW STD  
INTERNAL TEMP 23 °C  
GAIN 10 250 UL INN

COMPOUND NAME PEAK R.T. AREA/PPB

INN	1	36.3	8.000 PPB
T-DCE	2	54.1	12.75 PPB
C-DCE	3	100.3	13.36 PPB
PCE	4	110.0	2.000-3.000 PPB MCB
UNKNOWN	5	136.4	132.3 MUS
TCE	6	220.0	16.31 PPB
TOLUENE	7	383.2	16.81 PPB
PCE	8	572.0	13.23 PPB

# PHOTOVAC

CALIBRATED PEAK 6 TCE

SAMPLE LIBRARY 2 APR 17 1994 11:12  
ANALYSIS # 25 LOW STD  
INTERNAL TEMP 23 °C  
GAIN 10 250 UL INN

COMPOUND NAME PEAK R.T. AREA/PPB

INN	1	36.3	8.000 PPB
T-DCE	2	54.1	12.75 PPB
C-DCE	3	100.3	13.36 PPB
PCE	4	110.0	2.000-3.000 PPB MCB
UNKNOWN	5	136.4	132.3 MUS
TCE	6	220.0	16.31 PPB
TOLUENE	7	383.2	16.81 PPB
PCE	8	572.0	13.23 PPB

# PHOTOVAC

2 COPPLING ID # R.T. AREA

INU	1	36.2	1822. PPS
T-DCE	2	41.3	1000. PPS
C-DCE	3	126.3	1821. PPS
TCE	4	225.0	1822. PPS
TOLUENE	5	336.2	1822. PPS
PCE	6	386.3	1821. PPS

# PHOTOVAC

START-----

-----A-----

-----B-----

-----C-----

-----D-----

-----E-----

-----F-----

-----G-----

-----H-----

-----I-----

-----J-----

-----K-----

-----L-----

-----M-----

-----N-----

-----O-----

-----P-----

-----Q-----

-----R-----

-----S-----

-----T-----

-----U-----

-----V-----

-----W-----

-----X-----

-----Y-----

-----Z-----

# PHOTOVAC

START-----

-----A-----

-----B-----

-----C-----

-----D-----

-----E-----

-----F-----

-----G-----

-----H-----

-----I-----

-----J-----

-----K-----

-----L-----

-----M-----

-----N-----

-----O-----

-----P-----

-----Q-----

-----R-----

-----S-----

-----T-----

-----U-----

-----V-----

-----W-----

-----X-----

-----Y-----

-----Z-----

# PHOTOVAC

START-----

-----A-----

-----B-----

-----C-----

-----D-----

-----E-----

-----F-----

-----G-----

-----H-----

-----I-----

-----J-----

-----K-----

-----L-----

-----M-----

-----N-----

-----O-----

-----P-----

-----Q-----

-----R-----

-----S-----

-----T-----

-----U-----

-----V-----

-----W-----

-----X-----

-----Y-----

-----Z-----

McB

STOP 8 1822.8

SAMPLE LIBRARY 1 APR 17 1994 18150

ANALYSIS 8 22 LOW STD

INTERNAL TEMP 20 WATER

GAIN 10 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

INU	1	36.2	8,000 PPS
UNKNOWN	2	41.3	301.2 MUS
UNKNOWN	3	66.0	19.7 MUS
UNKNOWN	4	85.3	291.4 MUS
C-DCE	5	107.2	38.17 PPS
TCE	7	225.0	8,342 PPS
TOLUENE	8	331.3	133.7 MUS
PCE	9	336.2	1,082 PPS
	10	386.3	12.66 PPS

# PHOTOVAC

ALIBERATED PEAK 8-TCE

SAMPLE LIBRARY 1 APR 17 1994 1118

ANALYSIS 8 22 LOW STD

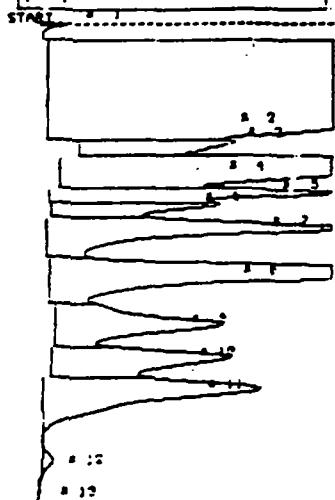
INTERNAL TEMP 20 WATER

GAIN 10 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

INU	1	36.2	8,000 PPS
UNKNOWN	2	41.3	301.2 MUS
UNKNOWN	3	55.3	471.8 MUS
T-DCE	4	84.8	18.35 PPS
C-DCE	5	106.4	8,003 PPS
UNKNOWN	6	114.1	1.2 MUS
UNKNOWN	7	136.0	162.6 MUS
TCE	8	224.4	2,334 PPS
TOLUENE	9	336.2	5,363 PPS
PCE	10	386.3	12.33 PPS

# PHOTOVAC



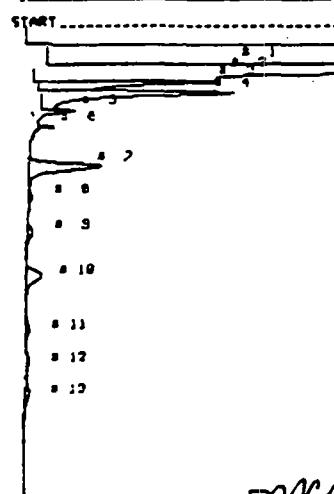
STOP 8 1990.8  
SAMPLE LIBRARY 3 APR 16 1994 19:13  
ANALYSIS # 19 SO-G  
INTERNAL TEMP 20 AIR  
GAIN 50 500 UL INU

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	2	189.2 2.4 KUS
UNKNOWN	3	155.7 12.4 US
TCE	4	229.0 3.865 PPM OS
UNKNOWN	5	224.0 12.7 US
UNKNOWN	6	254.7 3.3 US
UNKNOWN	7	228.9 37.2 US
TOLUENE	8	256.6 4.823 PPM OS
UNKNOWN	9	464.9 21.7 US
UNKNOWN	10	536.3 13.9 US
PCE	11	585.3 646.6 PPM
UNKNOWN	12	706.1 637.8 PUS

OS - Offscale:

Use reanalysis  
results

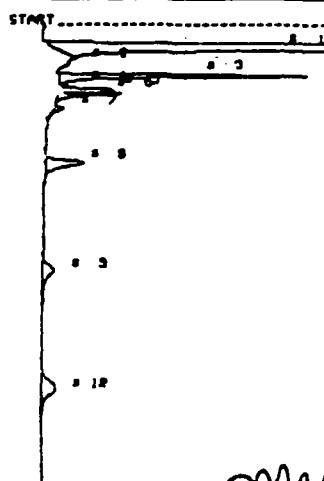
# PHOTOVAC



STOP 8 758.4  
SAMPLE LIBRARY 3 APR 16 1994 19:13  
ANALYSIS # 19 SO-G  
INTERNAL TEMP 20 AIR  
GAIN 2 500 UL INU

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	45.4 222.5 US
UNKNOWN	2	65.4 22.1 US
T-CCE	3	58.1 1.231 PPM ←
C-CCE	4	169.3 6.206 PPM ←
UNKNOWN	5	138.4 1.0 US
TCE	7	226.0 1.843 PPM ←
UNKNOWN	9	372.2 372.6 PUS
TOLUENE	10	169.3 770.6 PUS ←
UNKNOWN	11	466.2 242.3 PUS
UNKNOWN	12	536.3 166.3 PUS
PCE	13	585.3 166.3 PPM

# PHOTOVAC



STOP 8 751.8  
SAMPLE LIBRARY 3 APR 16 1994 19:13  
ANALYSIS # 19 SO-G STD  
INTERNAL TEMP 20 SOIL  
GAIN 10 250 UL INU

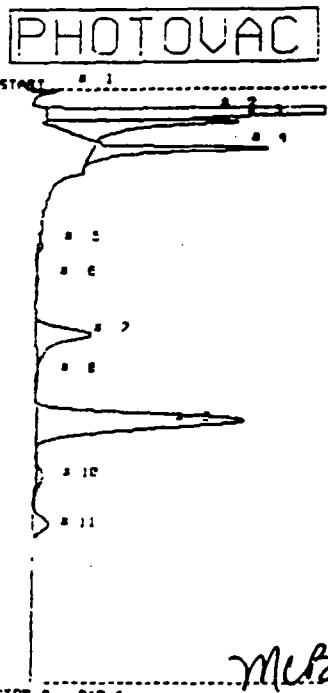
COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	35.2 45.8 US
UNKNOWN	3	65.0 4.2 US
UNKNOWN	4	161.3 173.3 PUS
UNKNOWN	5	166.1 366.8 PUS
C-CCE	6	114.1 15.62 PPM
UNKNOWN	7	139.0 281.3 PUS
UNKNOWN	8	225.0 1.4 US
UNKNOWN	9	339.3 672.3 PUS
UNKNOWN	10	366.3 1.0 US

# PHOTOVAC

CALIBRATED PEAK 8, TCE

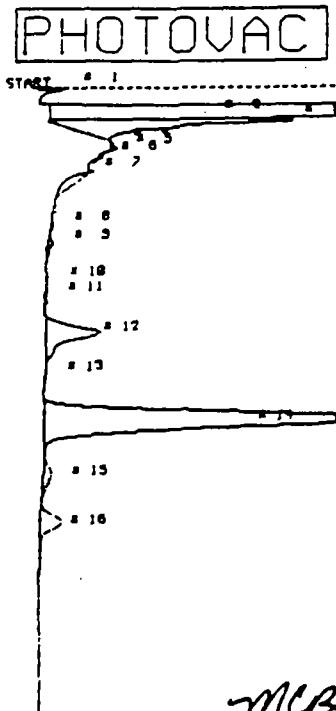
SAMPLE LIBRARY 3 APR 16 1994 19:13  
ANALYSIS # 19 SO-G STD  
INTERNAL TEMP 20 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME	PEAK R.T.	AREA/PPM
INU	1	33.2 8.000 PPM
T-CCE	3	65.0 12.21 PPM
UNKNOWN	4	161.3 173.3 PUS
C-CCE	5	166.1 15.23 PPM
C-CCE	6	114.1 16.62 PPM
UNKNOWN	7	139.0 281.3 PUS
TCE	8	223.6 5.443 PPM
TOLUENE	9	339.3 7.323 PPM
PCE	10	366.3 8.633 PPM



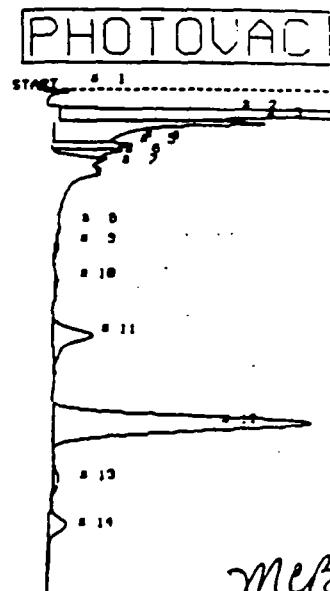
STOP 0 348.4  
SAMPLE LIBRARY 3 APR 16 1994 10124  
ANALYSIS # 14 SD-3  
INTERNAL TEMP 28 AIR  
GAIN 50 500 UL JNU  
COMPOUND NAME PEAK R.T. AREA/PPM

INJ	2	38.2	8,889	PPB
UNKNOWN	3	52.9	8.2	US
UNKNOWN	4	108.0	5.6	US
UNKNOWN	5	255.6	126.2	μUS
TOLUENE	7	359.2	135.7	PPB
UNKNOWN	9	539.7	18.4	US
UNKNOWN	10	627.1	678.3	μUS
UNKNOWN	11	706.1	1.1	US



STOP 0 1699.0  
SAMPLE LIBRARY 3 APR 16 1994 10144  
ANALYSIS # 15 SD-4  
INTERNAL TEMP 28 AIR  
GAIN 50 500 UL JNU  
COMPOUND NAME PEAK R.T. AREA/PPM

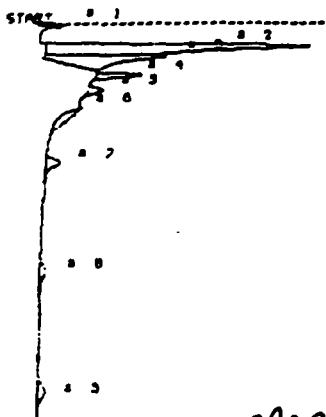
UNKNOWN	2	48.3	65.9	US
UNKNOWN	3	55.7	10.8	US
UNKNOWN	5	100.3	168.2	μUS
UNKNOWN	9	235.6	165.3	μUS
TOLUENE	12	356.2	141.8	PPB
UNKNOWN	14	533.3	62.2	US
UNKNOWN	15	627.1	824.4	μUS
UNKNOWN	16	704.3	1.6	US



STOP 0 662.2  
SAMPLE LIBRARY 3 APR 16 1994 10144  
ANALYSIS # 16 SD-5  
INTERNAL TEMP 28 AIR  
GAIN 50 500 UL JNU

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	2	38.5 8,000 PPB
UNKNOWN	3	50.3 11.4 US
UNKNOWN	4	51.9 2.5 US
UNKNOWN	5	100.0 1.5 US
UNKNOWN	10	311.5 129.5 μUS
TOLUENE	11	359.2 58.16 PPB
UNKNOWN	12	359.7 22.9 US
UNKNOWN	13	628.7 639.8 μUS
UNKNOWN	14	704.3 1.1 US

# PHOTOVAC

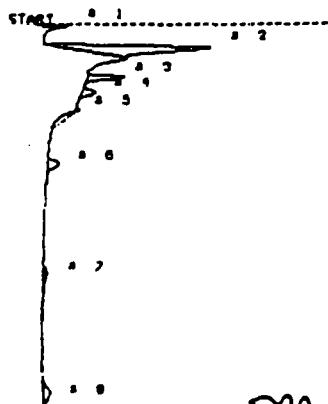


STOP 0 663.1  
SAMPLE LIBRARY 3 APR 16 1994 17110  
ANALYSIS # 10 LOW STD  
INTERNAL TEMP 20 AIR  
GAIN 50 500 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	2	38.8	18.7 US
UNKNOWN	3	54.9	4.1 US
UNKNOWN	4	88.5	1.8 US
UNKNOWN	5	183.3	451.0 MUS
UNKNOWN	7	220.6	359.2 MUS
UNKNOWN	8	484.7	326.9 MUS
UNKNOWN	9	595.3	318.7 MUS

MCB

# PHOTOVAC

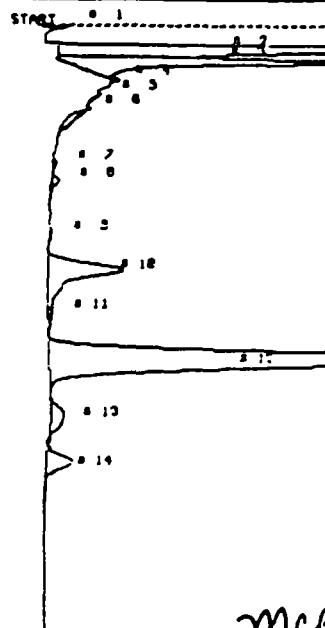


STOP 0 663.1  
SAMPLE LIBRARY 3 APR 16 1994 17127  
ANALYSIS # 11 LOW STD  
INTERNAL TEMP 20 AIR  
GAIN 50 500 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INJ	2	38.7	0.000 PPM
T-DCE	3	66.2	12.37 PPM
C-DCE	4	183.3	14.66 PPM
TCE	6	220.6	11.19 PPM
TOLUENE	7	484.7	2.301 PPM
PCE	9	595.3	13.68 PPM

MCB

# PHOTOVAC



STOP 0 663.2  
SAMPLE LIBRARY 3 APR 16 1994 1814  
ANALYSIS # 12 SD-2  
INTERNAL TEMP 20 AIR  
GAIN 50 500 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INJ	2	38.6	0.000 PPM
UNKNOWN	3	53.4	13.4 US
UNKNOWN	4	92.2	127.3 MUS
UNKNOWN	8	232.7	272.8 MUS
TOLUENE	10	488.3	211.1 PPM
UNKNOWN	11	482.9	232.2 MUS
UNKNOWN	12	536.3	118.3 US
UNKNOWN	13	631.9	1.6 US
UNKNOWN	14	707.3	1.0 US

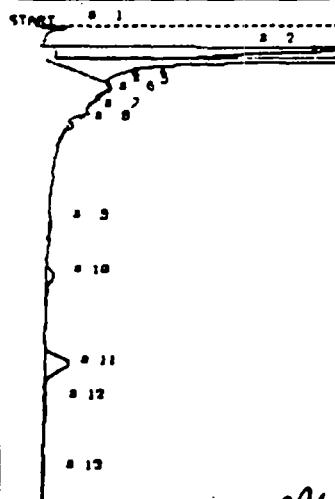
MCB

# PHOTOVAC

SAMPLE LIBRARY 3 APR 16 1994 17114  
ANALYSIS # 10 LOW STD  
INTERNAL TEMP 20 AIR  
GAIN 50 500 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INJ	2	38.8	0.000 PPM
UNKNOWN	3	54.9	4.1 US
T-DCE	4	88.5	15.88 PPM
C-DCE	5	183.3	16.28 PPM
TCE	7	220.6	13.66 PPM
TOLUENE	8	484.7	11.58 PPM
PCE	9	595.3	12.88 PPM

# PHOTOVAC



STOP 0 700.1  
SAMPLE LIBRARY 3 APR 16 1994 17142  
ANALYSIS # 11 SD-1  
INTERNAL TEMP 20 AIR  
GAIN 50 500 UL INJ

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INJ	2	37.8	0.000 PPM
UNKNOWN	3	55.4	14.4 US
UNKNOWN	5	180.3	125.9 MUS
UNKNOWN	6	153.2	185.0 MUS
TOLUENE	10	481.4	14.40 PPM
UNKNOWN	11	542.5	2.0 US
UNKNOWN	13	707.3	186.5 MUS

MCB

**PHOTOVAC**

START  
S - 1  
S - 2  
S - 3  
S - 4

STOP @ 1000.0  
SAMPLE LIBRARY 3 APR 16 1994 14150  
ANALYSIS # 5 LOU STD  
INTERNAL TEMP 19 AIR  
QFT/M 18 253 UL INU

COMPOUND NAME PERK R.T. AREA/PPT

**PHOTOVAC**

STOP 0 1822.0  
SAMPLE LIBRARY 3 APR 16 1994 16123  
ANALYSIS 8 7 ROOM AIR  
INTERNAL TEMP 19 AIR  
GAIN 50 500 LF SWL

COMPOUND NAME	PEAK	I.T.	PERCENT
UNKNOWN	1	4.1	112.9 MUS
UNKNOWN	2	36.3	44.4 MUS
UNKNOWN	3	57.3	7.1 MUS
UNKNOWN	5	183.3	385.1 MUS
UNKNOWN	6	116.6	1.2 MUS
UNKNOWN	8	318.7	318.1 MUS
UNKNOWN	9	416.2	621.5 MUS
UNKNOWN	10	604.7	185.8 MUS

**PHOTOVAC**

A hand-drawn diagram of a vertical cylinder. At the top, there is a horizontal line with three points labeled 1, 2, and 3 from left to right. A curved line descends from point 1 to the surface of the cylinder. On the cylinder's surface, there are several points labeled with numbers: 4, 5, 6, 7, 8, 9, and 10. Point 4 is at the top, followed by 5, 6, and 7 in a cluster near the middle; 8 is lower down; 9 is further down; and 10 is at the very bottom. There are also some unlabeled small dots on the cylinder's surface.

STOP 6 739.4  
SAMPLE LIBRARY 3 APR 16 1934 16:54  
ANALYSIS 6 9 LOU STD  
INTERNAL TEMP 28 AIR  
GAIN 20 300 UL JAU

COMPOUND NAME	PEAK	R.T.	ABSORBANCE
UNKNOWN	2	36.4	372.0 MUS
UNKNOWN	4	62.1	427.3 MUS
UNKNOWN	7	238.4	195.3 MUS
UNKNOWN	9	487.0	114.6 MUS
UNKNOWN	2	223.9	212.3 MUS

**PHOTOVAC**

```

graph TD
    START((START)) --- S1[S-1]
    START --- S2[S-2]
    S2 --- S3[S-3]
    S2 --- S4[S-4]
    S3 --- S5[S-5]
    S4 --- S5
  
```

STOP 8 732.3  
SAMPLE LIBRARY 3 APR 16 1994 100-4  
ANALYSIS 8 6 LOW STD  
INTERNAL TEMP 19 AIR  
BRIN 18 250 UL INH

COMPOUND NAME PEAK R.T. PRESENT

UNKNOWN 1 28.4 183.3 445

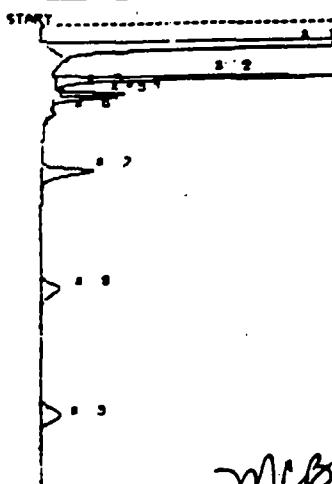
**PHOTOVAC**

STOP 6 723.4  
SAMPLE LIBRARY 3 APR 16 1994 16:38  
ANALYSIS 6 0 ROOM AIR  
INTERNAL TEMP 20 AIR  
PUMP RATE 20 ml/min

COMPOUND NAME PERK S.T. MEASURED

UNKNOWN	2	44.5	:23.1	US
UNKNOWN	4	103.0	:13.4	AUS
UNKNOWN	5	116.5	:02.7	AUS
UNKNOWN	8	485.1	:26.1	AUS
UNKNOWN	9	604.7	:00.0	AUS

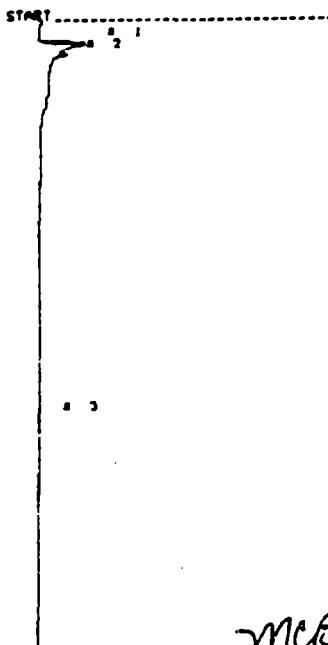
# PHOTOVAC



STOP 0 740.3  
SAMPLE LIBRARY 2 APR 16 1994 11:56  
ANALYSIS # 1 LOW STD  
INTERNAL TEMP 10 SOIL  
GAIN 10 250 UL INJ

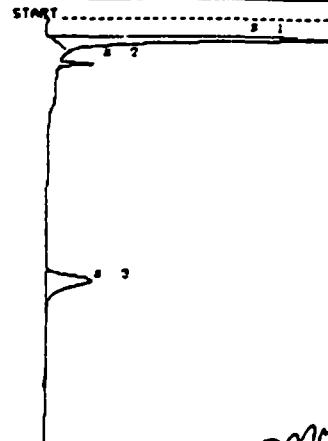
COMPOUND NAME PEAK R.T. AREA/PPM  
INJ 1 36.4 8.888 PPM  
UNKNOWN 2 69.4 5.3 US  
C-DCE 3 107.1 1.363 PPM  
UNKNOWN 4 114.2 1.2 US  
UNKNOWN 5 121.2 1.2 US  
UNKNOWN 7 248.9 0.1 US  
UNKNOWN 8 426.9 1.2 US  
UNKNOWN 9 630.3 1.0 US

# PHOTOVAC



STOP 0 1000.0  
SAMPLE LIBRARY 2 APR 16 1994 12:16  
ANALYSIS # 2 VSS-2  
INTERNAL TEMP 10 SOIL  
GAIN 10 250 UL INJ  
COMPOUND NAME PEAK R.T. AREA/PPM  
INJ 1 36.6 8.888 PPM  
UNKNOWN 2 57.7 105.6 PUS

# PHOTOVAC



STOP 0 700.0  
SAMPLE LIBRARY 2 APR 16 1994 12:14  
ANALYSIS # 4 VSS-2  
INTERNAL TEMP 10 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 37.3 3.5 US  
UNKNOWN 2 75.1 434.9 PUS  
TOLUENE 3 425.6 32.68 PPM

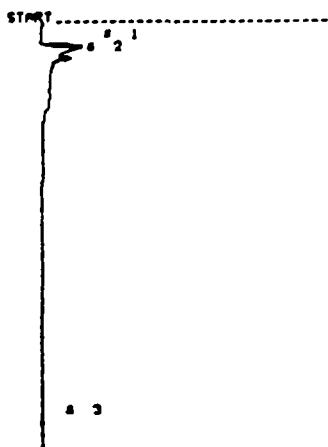
# PHOTOVAC

CALIBRATED PEAK 7-TCE

SAMPLE LIBRARY 2 APR 16 1994 11:57  
ANALYSIS # 1 LOW STD  
INTERNAL TEMP 10 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
INJ 1 36.4 8.888 PPM  
T-DCE 2 63.4 13.13 PPM  
UNKNOWN 3 103.2 143.7 PPM  
C-DCE 4 114.2 17.08 PPM  
~~T-DCE~~ 5 102.2 107.7 PPM  
TCE 7 248.8 15.56 PPM  
TOLUENE 8 435.2 15.74 PPM  
PCE 9 630.3 13.34 PPM

# PHOTOVAC



STOP 0 730.0  
SAMPLE LIBRARY 2 APR 16 1994 12:16  
ANALYSIS # 3 VSS-2  
INTERNAL TEMP 10 SOIL  
GAIN 10 250 UL INJ  
COMPOUND NAME PEAK R.T. AREA/PPM  
INJ 1 36.6 8.888 PPM  
UNKNOWN 2 57.5 141.0 PUS

# PHOTOVAC

3 COMPOUND ID & R.T. LIMIT  
PCE 31.4 100.0 PPM

**PHOTOVAC**

START ..... 1

• 2  
• 3  
• 4  
  
• 6

STOP 8 754.6  
SAMPLE LIBRARY 1 APR 15 1334 16:47  
ANALYSIS # 23 MP-28-108  
INTERNAL TEMP 28 °C  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	48.1	1.2	US
TOLUENE	5	322.2	11.45	PPB

*MCR***PHOTOVAC**

START ..... 1

• 2  
• 3  
  
• 10  
  
• 11

STOP 8 848.3  
SAMPLE LIBRARY 1 APR 15 1334 17:55  
ANALYSIS # 23 LOU STD  
INTERNAL TEMP 28 °C  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	48.1	1.3	US
UNKNOWN	2	48.3	3.3	US
UNKNOWN	3	55.5	2.7	US
T-DCE	4	65.8	6.351	PPB
C-DCE	6	108.1	2.136	PPB
UNKNOWN	7	113.8	365.9	PPB
UNKNOWN	8	138.8	178.5	PPB
TCE	9	223.8	3.264	PPB
TOLUENE	10	355.2	3.729	PPB
PCE	11	501.8	5.416	PPB

*MCR***PHOTOVAC**

1 COMPOUND ID # R.T. LIMIT

INJ	1	34.6	1000.	PPM
T-DCE	2	65.3	1000.	PPM
C-DCE	3	65.4	1000.	PPM
TCE	4	223.8	1000.	PPM
TOLUENE	5	357.0	1000.	PPM
PCE	6	501.1	1000.	PPM

**PHOTOVAC**

START ..... 1

• 2  
• 3  
  
• 10  
  
• 11

• 12

*MCR*

STOP 8 781.0  
SAMPLE LIBRARY 1 APR 15 1334 18:18  
ANALYSIS # 28 MP-15-18  
INTERNAL TEMP 28 °C REANALYSIS  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	2	48.3	514.5	PPB
UNKNOWN	3	57.7	229.7	PPB
UNKNOWN	4	65.2	15.6	US
UNKNOWN	5	65.8	724.8	PPB
UNKNOWN	7	114.1	664.1	PPB
UNKNOWN	8	148.4	3.2	US
UNKNOWN	10	328.6	568.9	PPB
PCE	12	501.3	1.000	PPB

**PHOTOVAC**

CALIBRATED PEAK 9-TCE

SAMPLE LIBRARY 1 APR 15 1334 17:55  
ANALYSIS # 23 LOU STD  
INTERNAL TEMP 28 °C  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

INJ	1	48.1	8.000	PPB
UNKNOWN	2	48.3	3.3	US
UNKNOWN	3	55.5	2.7	US
T-DCE	4	65.8	6.356	PPB
C-DCE	6	108.1	2.138	PPB
UNKNOWN	7	113.8	363.8	PPB
UNKNOWN	8	138.8	178.5	PPB
TCE	9	223.8	3.264	PPB
TOLUENE	10	355.2	3.729	PPB
PCE	11	501.8	5.416	PPB

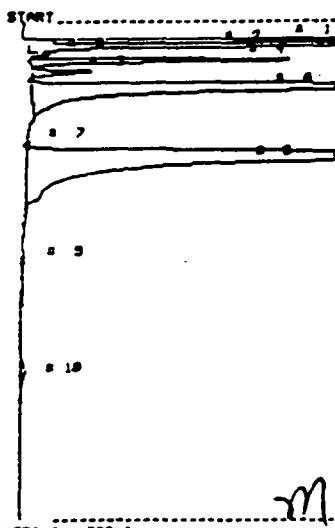
*MCR*

STOP 8 828.3  
SAMPLE LIBRARY 1 APR 15 1334 17:129  
ANALYSIS # 28 MP-15-18  
INTERNAL TEMP 28 °C  
GAIN 10 250 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	2	48.1	511.6	PPB
UNKNOWN	3	57.7	228.6	PPB
UNKNOWN	4	65.3	10.9	US
UNKNOWN	5	65.8	679.2	PPB
UNKNOWN	7	113.8	716.5	PPB
UNKNOWN	8	148.4	8.3	US
UNKNOWN	10	328.6	679.3	PPB
PCE	12	501.8	1.000	PPB

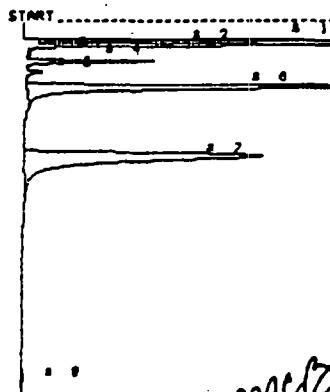
PHOTOVAC



STOP 0 700.2  
SAMPLE LIBRARY 1 APR 15 1994 15:20  
ANALYSIS # 23 RP-18-10  
INTERNAL TEMP 21 REANALYSIS  
GAIN 2 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	32.6 8.300 PPM
UNKNOWN	2	49.2 18.6 US
UNKNOWN	3	54.9 330.3 US
UNKNOWN	4	65.3 4.4 US
T-DCE	5	84.1 12.01 PPM
C-DCE	6	107.4 2.328 PPM OS
TCE	7	213.2 1.322 PPM OS
PCE	10	269.3 6.100 PPM

PHOTOVAC

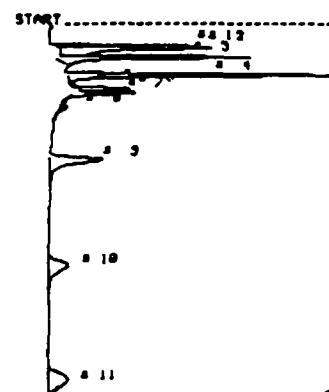


STOP 0 612.1  
SAMPLE LIBRARY 1 APR 15 1994 15:48  
ANALYSIS # 25 RP-18-10  
INTERNAL TEMP 21 REANALYSIS  
GAIN 2 50 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	31.2 2.7 US
UNKNOWN	2	33.8 3.3 US
UNKNOWN	4	65.3 1.2 US
T-DCE	5	84.1 2.004 PPM
C-DCE	6	106.8 323.2 PPM ←
TCE	7	220.8 186.8 PPM ←

X 5

PHOTOVAC



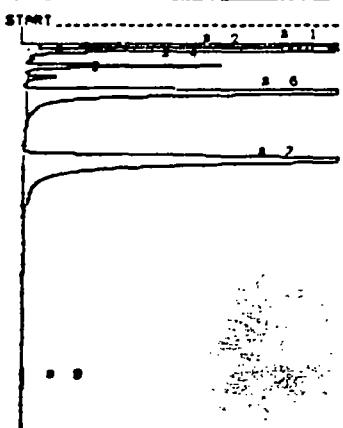
STOP 0 633.1  
SAMPLE LIBRARY 1 APR 15 1994 16:01  
ANALYSIS # 26 LOW STD  
INTERNAL TEMP 20 WATER  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	35.3 1.3 US
UNKNOWN	2	49.1 3.4 US
UNKNOWN	3	55.1 2.8 US
T-DCE	4	84.4 3.368 PPM
C-DCE	6	107.2 7.887 PPM
UNKNOWN	7	112.9 336.1 PUS
UNKNOWN	8	132.2 181.1 PUS
TCE	9	221.4 5.941 PPM
TOLUENE	10	331.2 4.150 PPM
PCE	11	524.3 6.273 PPM

MCB

OS-offscale - use  
reanalysis results

PHOTOVAC



STOP 0 637.3  
SAMPLE LIBRARY 1 APR 15 1994 16:02  
ANALYSIS # 26 LOW STD  
INTERNAL TEMP 20 WATER  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	32.8 5.1 US
UNKNOWN	2	49.8 6.3 US
UNKNOWN	4	65.1 2.2 US
T-DCE	5	83.8 1.048 PPM OS
C-DCE	6	106.3 1.001 PPM OS
TCE	7	218.4 447.4 PPM OS
PCE	8	269.3 2.363 PPM OS

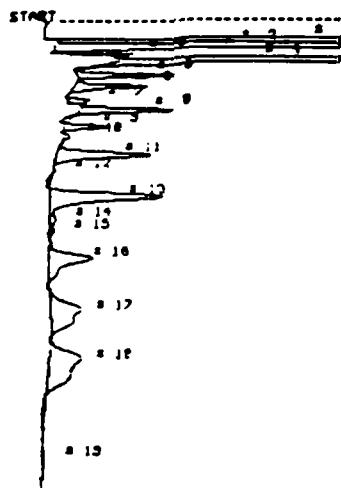
PHOTOVAC

CALIBRATED PEAK 9,TCE

SAMPLE LIBRARY 1 APR 15 1994 16:02  
ANALYSIS # 26 LOW STD  
INTERNAL TEMP 20 WATER  
GAIN 10 250 UL INJ

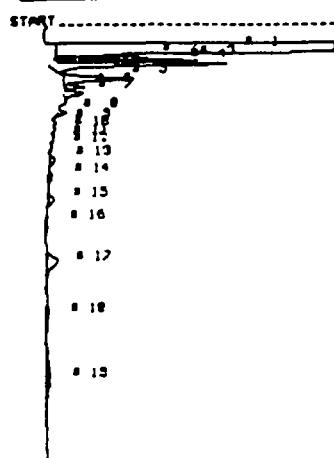
COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	35.3 8.300 PPM
UNKNOWN	2	49.1 3.4 US
UNKNOWN	3	55.1 2.8 US
T-DCE	4	84.4 3.368 PPM
C-DCE	6	107.2 7.887 PPM
UNKNOWN	7	112.9 336.1 PUS
UNKNOWN	8	132.2 181.1 PUS
TCE	9	221.4 5.941 PPM
TOLUENE	10	331.2 4.150 PPM
PCE	11	524.3 6.273 PPM

# PHOTOVAC



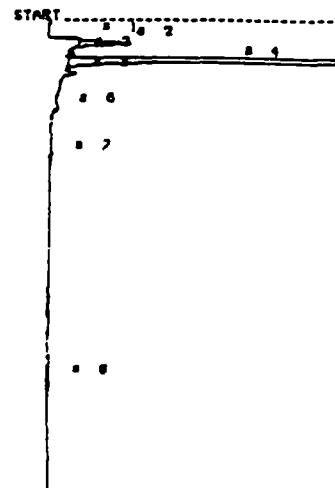
COMPOUND NAME	PEAK	R.T.	AREA/PPM
INU	1	33.4	0.800 PPM
UNKNOWN	2	42.0	12.3 US
UNKNOWN	3	53.3	680.5 PUS
UNKNOWN	4	65.1	12.2 US
UNKNOWN	5	66.9	1.0 US
C-DCE	6	186.8	15.44 PPM
UNKNOWN	7	139.4	445.0 PUS
UNKNOWN	8	140.8	2.1 US
UNKNOWN	9	174.2	1.0 US
UNKNOWN	10	191.2	211.4 PUS
TCE	11	226.2	3.730 PPM
UNKNOWN	12	266.3	5.5 US
UNKNOWN	13	324.1	584.5 PUS
UNKNOWN	14	343.8	186.8 PUS
TOLUENE	15	362.2	9.307 PPM
UNKNOWN	16	478.0	3.2 US
PCE	17	540.1	16.79 PPM

# PHOTOVAC



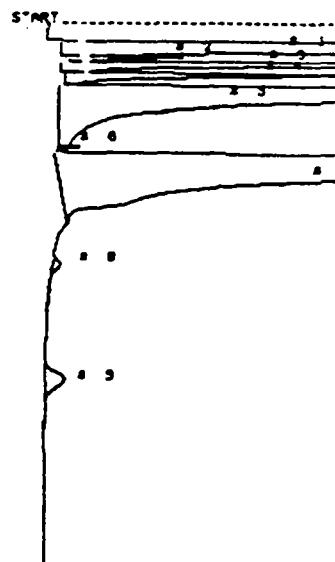
COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	38.3	55.2 US
UNKNOWN	2	54.7	1.1 US
UNKNOWN	3	63.1	2.6 US
UNKNOWN	4	65.1	2.8 US
UNKNOWN	5	68.3	1.0 US
C-DCE	6	182.7	4.165 PPM
UNKNOWN	7	112.9	475.0 PUS
UNKNOWN	8	144.8	153.4 PUS
TCE	9	226.6	0.523 PPM
UNKNOWN	10	247.9	155.4 PUS
UNKNOWN	11	285.9	239.2 PUS
TOLUENE	12	366.2	2.442 PPM
UNKNOWN	13	468.0	122.0 PUS
PCE	14	563.0	2.267 PPM

# PHOTOVAC



COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	2	48.1	319.0 PUS
UNKNOWN	4	64.8	11.6 US
UNKNOWN	5	68.0	159.5 PUS

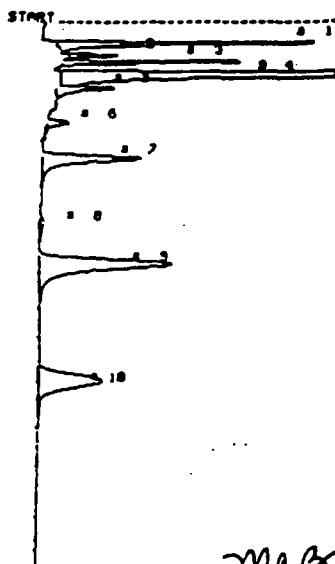
# PHOTOCVAC



COMPOUND NAME	PEAK	R.T.	AREA/PPM
UNKNOWN	1	37.9	65.0 US
UNKNOWN	2	54.7	2.2 US
UNKNOWN	3	65.3	17.3 US
T-DCE	4	83.8	10.25 PPM
UNKNOWN	5	112.2	126.4 US
UNKNOWN	6	157.2	326.0 PUS
TCE	7	229.0	636.0 PPM
TOLUENE	8	365.2	6.326 PPM
PCE	9	500.0	0.003 PPM

OS - offscale, use reanalysis.

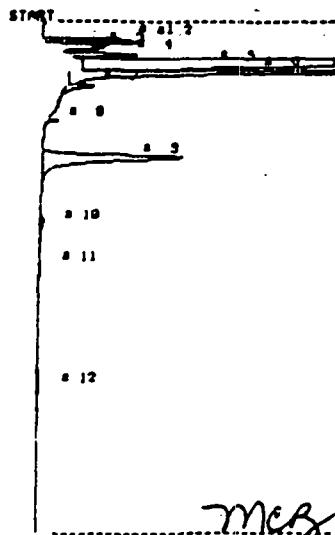
# PHOTOVAC



*mcb*  
STOP 8 805.4  
SAMPLE LIBRARY 2 APR 15 1994 13:16  
ANALYSIS 8 15 MP-10-13  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	35.3 0.000 PPM
UNKNOWN	2	35.3 624.7 PPM
UNKNOWN	3	66.1 2.1 US
T-DCE	4	65.1 24.49 PPM
C-DCE	5	100.1 20.12 PPM
UNKNOWN	6	100.2 336.5 PPM
TCE	7	223.8 23.71 PPM
UNKNOWN	8	320.6 162.0 PPM
TOLUENE	9	335.2 95.09 PPM
PCE	10	500.3 40.57 PPM

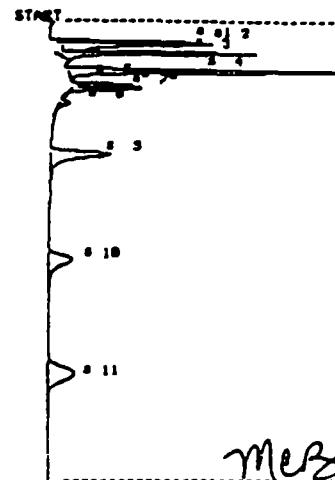
# PHOTOVAC



*mcb*  
STOP 8 805.3  
SAMPLE LIBRARY 2 APR 15 1994 13:12  
ANALYSIS 8 16 MP-10-23  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	32.2 278.7 PPM
INJ	2	35.2 0.000 PPM
UNKNOWN	4	36.7 1.1 US
UNKNOWN	5	67.7 29.1 US
T-DCE	6	63.2 25.62 PPM
C-DCE	7	107.2 8.003 PPM
TCE	8	222.8 24.49 PPM
UNKNOWN	10	325.9 163.1 PPM
PCE	12	501.0 1.181 PPM

# PHOTOVAC



*mcb*  
STOP 8 722.1  
SAMPLE LIBRARY 1 APR 15 1994 13:13  
ANALYSIS 8 18 LOU STD  
INTERNAL TEMP 21 WATER  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	35.3 0.000 PPM
UNKNOWN	2	35.3 3.3 US
UNKNOWN	3	35.1 2.0 US
UNKNOWN	4	64.0 4.6 US
UNKNOWN	6	106.3 965.0 PPM
C-DCE	7	112.8 10.11 PPM
UNKNOWN	8	130.0 163.4 PPM
UNKNOWN	9	220.0 2.1 US
UNKNOWN	10	363.2 1.4 US
UNKNOWN	11	571.3 2.1 US

# PHOTOVAC

START -----  
8.1  
8.2  
8.3  
8.4  
8.5  
8.6  
8.7  
8.8  
8.9  
8.10  
8.11  
8.12  
STOP 8 701.0

*mcb*  
STOP 8 701.0  
SAMPLE LIBRARY 2 APR 15 1994 13:14  
ANALYSIS 8 17 MP-11-23  
INTERNAL TEMP 21 SOIL  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
INJ	1	35.2 0.000 PPM

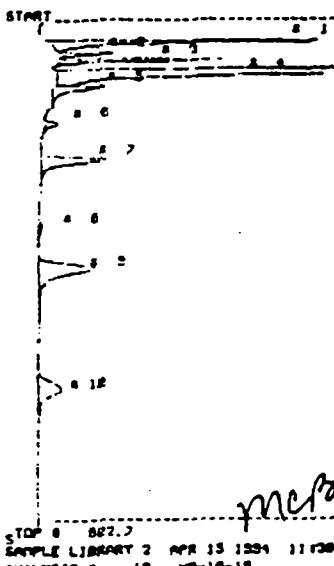
# PHOTOVAC

CALIBRATED PEAK 8 TCE

SAMPLE LIBRARY 1 APR 15 1994 13:13  
ANALYSIS 8 10 LOU STD  
INTERNAL TEMP 21 WATER  
GAIN 10 250 UL INJ

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	35.3 1.2 US
UNKNOWN	2	35.3 3.3 US
UNKNOWN	3	35.1 2.0 US
T-DCE	4	64.0 10.33 PPM
C-DCE	6	106.3 2.530 PPM
UNKNOWN	7	112.8 1.1 US
UNKNOWN	8	130.0 163.4 PPM
TCE	9	228.8 6.533 PPM
TOLUENE	10	363.2 4.818 PPM
PCE	11	571.3 0.971 PPM

**PHOTOVAC**

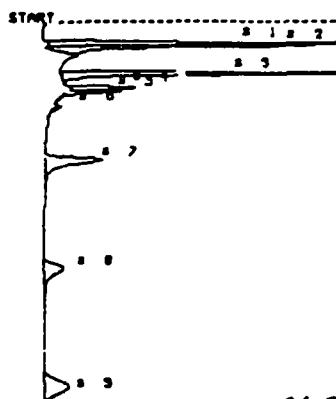


STOP 8 822.7  
SAMPLE LIBRARY 2 APR 15 1994 11130  
ANALYSIS # 12 NP-16-15  
INTERNAL TEMP 28 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INU	1	35.2	0.002 PPM
UNKNOWN	2	48.3	1.1 US
UNKNOWN	3	85.1	1.9 US
T-DCE	4	189.6	0.272 PPM
C-DCE	5	115.8	0.856 PPM
UNKNOWN	6	149.8	112.0 μUS
TCE	7	222.4	0.655 PPM
UNKNOWN	8	182.5	0.593 PPM
TOLUENE	9	42.8	1.705 PPM
PCE	10	590.7	0.362 PPM

*mcb*

**PHOTOVAC**



STOP 8 655.1  
SAMPLE LIBRARY 2 APR 15 1994 11140  
ANALYSIS # 13 LOW STD  
INTERNAL TEMP 28 SOIL  
GAIN 10 250 UL INU

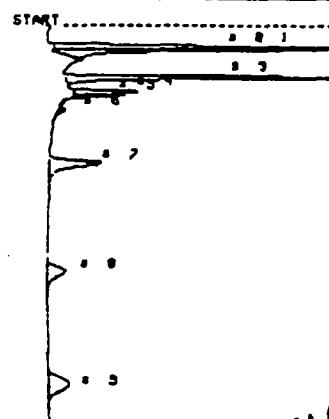
COMPOUND NAME	PEAK	R.T.	AREA/PPM
INU	1	35.2	0.000 PPM
UNKNOWN	2	48.3	4.1 US
T-DCE	3	85.1	0.754 PPM
C-DCE	4	189.6	0.754 PPM
UNKNOWN	5	115.8	0.566 PPM
UNKNOWN	6	149.8	112.0 μUS
TCE	7	222.4	0.655 PPM
TOLUENE	8	182.5	0.593 PPM
PCE	9	592.3	0.653 PPM

*mcb*

**PHOTOVAC**

COMPOUND	ID #	R.T.	LIMIT
INU	1	35.2	0.000 PPM
T-DCE	2	85.1	0.000 PPM
C-DCE	3	189.6	0.000 PPM
TCE	4	222.4	0.000 PPM
TOLUENE	5	182.5	0.000 PPM
PCE	6	592.3	0.000 PPM

**PHOTOVAC**



STOP 8 672.0  
SAMPLE LIBRARY 2 APR 15 1994 12150  
ANALYSIS # 14 LOW STD  
INTERNAL TEMP 28 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INU	1	35.2	0.000 PPM
UNKNOWN	2	48.3	4.1 US
T-DCE	3	85.1	1.571 PPM
C-DCE	4	189.6	16.05 PPM
UNKNOWN	5	115.8	12.05 PPM
UNKNOWN	6	149.8	112.0 μUS
TCE	7	222.4	13.23 PPM
TOLUENE	8	182.5	13.35 PPM
PCE	9	592.3	13.21 PPM

*mcb*

**PHOTOVAC**

CALIBRATED PEAK 9.TCE

SAMPLE LIBRARY 2 APR 15 1994 12154  
ANALYSIS # 14 LOW STD  
INTERNAL TEMP 28 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INU	1	35.2	0.000 PPM
UNKNOWN	2	48.3	4.2 US
T-DCE	3	84.2	14.33 PPM
C-DCE	4	189.6	15.91 PPM
UNKNOWN	5	115.8	765.0 μUS
UNKNOWN	6	149.8	138.8 μUS
TCE	7	222.4	13.24 PPM
TOLUENE	8	182.5	11.25 PPM
PCE	9	581.8	13.87 PPM

*mcb*

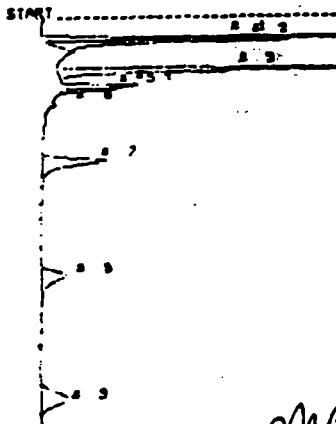
**PHOTOVAC**

SAMPLE LIBRARY 2 APR 15 1994 12130  
ANALYSIS # 13 LOW STD  
INTERNAL TEMP 28 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME	PEAK	R.T.	AREA/PPM
INU	1	35.2	0.000 PPM
UNKNOWN	2	48.3	4.1 US
T-DCE	3	85.1	15.71 PPM
C-DCE	4	189.6	16.05 PPM
C-DCE	5	115.8	13.00 PPM
UNKNOWN	6	149.8	112.0 μUS
TCE	7	222.4	13.23 PPM
TOLUENE	8	182.5	13.35 PPM
PCE	9	592.3	13.21 PPM

*mcb*

# PHOTOVAC



STOP 6 781.6  
SAMPLE LIBRARY 2 APR 15 1994 10:26  
ANALYSIS 8 3 LOW STD  
INTERNAL TEMP 20 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPM

INU	1	35.3	0.002	PPB
UNKNOWN	2	48.7	3.8	US
T-DCE	3	82.2	13.65	PPB
C-DCE	4	118.8	19.05	PPB
C-DCE	5	110.0	0.002	PPB
TCE	6	231.0	10.15	PPB
TOLUENE	7	412.0	12.00	PPB
PCE	8	615.0	15.25	PPB

MCB

# PHOTOVAC



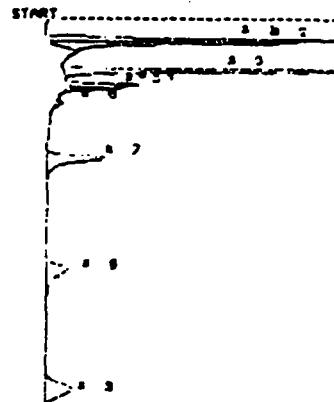
STOP 6 1890.0  
SAMPLE LIBRARY 2 APR 15 1994 10:46  
ANALYSIS 8 10 HIGH STD  
INTERNAL TEMP 20 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	33.8	0.2	US
UNKNOWN	2	42.8	7.8	US
UNKNOWN	3	48.4	1.1	US
UNKNOWN	4	57.2	26.2	PPB
UNKNOWN	5	68.1	12.5	US
UNKNOWN	6	83.1	1.7	US
C-DCE	7	117.0	22.01	PPB
UNKNOWN	8	139.0	577.1	PPB
UNKNOWN	9	352.2	3.1	US
UNKNOWN	10	356.2	1.0	US
UNKNOWN	11	356.6	155.0	PPB
TCE	12	334.0	20.01	PPB
UNKNOWN	13	368.3	2.0	US
UNKNOWN	14	346.6	43.1	PPB
UNKNOWN	15	356.2	142	PPB
TOLUENE	16	416.0	22.55	PPB
UNKNOWN	17	587.0	3.2	US
UNKNOWN	18	598.0	0.5	US

MCB

# PHOTOVAC



STOP 6 629.1  
SAMPLE LIBRARY 2 APR 15 1994 11:11  
ANALYSIS 8 11 LOW STD  
INTERNAL TEMP 20 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPM

INU	1	35.3	0.002	PPB
UNKNOWN	2	48.7	3.8	US
T-DCE	3	86.2	13.57	PPB
C-DCE	4	118.8	19.27	PPB
C-DCE	5	110.0	0.002	PPB
TCE	6	231.0	11.76	PPB
TOLUENE	7	412.0	18.57	PPB
PCE	8	607.1	14.82	PPB

MCB

# PHOTOVAC

CALIBRATED PEAK 7-TCE

SAMPLE LIBRARY 2 APR 15 1994 11:14  
ANALYSIS 8 11 LOW STD  
INTERNAL TEMP 20 SOIL  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPM

INU	1	35.3	0.002	PPB
UNKNOWN	2	48.7	3.8	US
T-DCE	3	86.2	0.675	PPB
C-DCE	4	118.8	0.002	PPB
T-DCE	5	110.0	0.002	PPB
TCE	6	231.0	0.700	PPB
TOLUENE	7	412.0	0.650	PPB
PCE	8	607.1	0.800	PPB

MCB

# PHOTOVAC

2 COMPOUND ID & R.T. LIMIT

INU	1	35.3	1000.	PPB
T-DCE	2	85.4	1000.	PPB
C-DCE	3	118.4	1000.	PPB
TCE	4	231.0	1000.	PPB
TOLUENE	5	411.7	1000.	PPB
PCE	6	605.0	1000.	PPB

# PHOTOVAC

START .....  
A 31  
A 5

A 2  
A 1  
A 10  
A 21

STOP 6 316.5  
SAMPLE LIBRARY : APR 15 1994 0754  
ANAL 6 0 LOG STD  
INJECTION TEMP 10 2011  
GAIN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPT  
INU 1 36.0 8.000 PPT  
UNKNOWN 2 41.2 3.2 US  
UNKNOWN 3 52.2 282.2 PUS  
UNKNOWN 4 64.3 525.4 PUS  
T-DCE 5 82.5 17.0 PPT  
TCE 6 241.6 8.362 PPT  
UNKNOWN 7 322.6 4.2 US  
TOLUENE 8 422.8 2.379 PPT  
PCE 10 640.8 1.761 PPT

# PHOTOVAC

START .....  
A 31  
A 5

A 2  
A 1  
A 10  
A 11  
A 12  
A 13  
A 14  
A 15  
A 16  
A 17  
A 18  
A 19  
A 20  
A 21

STOP 6 262.5  
SAMPLE LIBRARY : APR 15 1994 0754  
ANAL 6 0 LOG STD  
INJECTION TEMP 10 2011  
GAIN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPT  
UNKNOWN 1 36.0 8.000 PPT  
UNKNOWN 2 52.2 2.4 US  
UNKNOWN 3 64.3 6.6 US  
T-DCE 4 82.5 17.0 PPT  
UNKNOWN 5 262.5 1.5 US  
C-DCE 6 121.6 26.42 PPT  
UNKNOWN 7 172.2 136.8 PUS  
UNKNOWN 8 225.2 322.5 PUS  
TCE 10 242.8 0.114 PPT  
UNKNOWN 11 271.3 494.0 PUS  
UNKNOWN 12 325.8 1.9 US  
TOLUENE 13 424.8 0.618 PPT  
PCE 15 642.8 1.428 PPT

# PHOTOVAC

2 COMPOUND ID # R.T. LIMIT  
INJECTION 1 22.3 1000. PPT  
PCE 2 372.2 1000. PPT

# PHOTOVAC

START .....  
A 31  
A 5

A 2  
A 1  
A 10  
A 11  
A 12  
A 13  
A 14  
A 15  
A 16  
A 17  
A 18  
A 19  
A 20  
A 21

STOP 6 211.5  
SAMPLE LIBRARY : APR 15 1994 0754  
ANAL 6 0 LOG STD  
INJECTION TEMP 10 2011  
GAIN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPT  
UNKNOWN 1 36.0 4.1 US  
UNKNOWN 2 41.2 3.2 US  
UNKNOWN 3 68.1 6.4 US  
UNKNOWN 4 113.8 1.4 US  
UNKNOWN 5 113.8 882.1 PUS  
UNKNOWN 7 238.2 2.5 US  
UNKNOWN 8 424.9 1.8 US  
UNKNOWN 9 673.9 2.8 US

# PHOTOVAC

SAMPLE LIBRARY : APR 15 1994 0754  
ANALYSIS 6 0 LOG STD  
INJECTION TEMP 10 2011  
GAIN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPT  
INU 1 36.0 8.000 PPT  
UNKNOWN 2 41.2 3.2 US  
T-DCE 3 68.1 19.71 PPT  
C-DCE 4 113.8 16.85 PPT  
C-DCE 5 113.8 16.85 PPT  
TCE 7 238.2 13.72 PPT  
TOLUENE 8 424.9 15.35 PPT  
PCE 9 673.9 19.21 PPT

**PHOTOVAC**

START ..... 8.1

8.3

**PHOTOVAC**

CALIBRATED PEAK S.T.C.E.

SAMPLE LIBRARY 1: AFA 10 1024 001  
ANALYST: 6 100 STD  
INTERNAL TEMP: 10 WATER  
GAIN: 10 1000.0 IN.

COMPOUND NAME PEAK R.T. AREA/PPM

Toluene	1	32.4	8.800	PPM
UNKNOWN	2	42.2	3.2	US
UNKNOWN	3	58.5	3.0	US
T-DCE	4	50.2	12.83	PPM
C-DCE	6	115.6	8.785	PPM
UNKNOWN	7	123.6	1.2	US
TCE	9	243.0	8.826	PPM
TOLUENE	10	431.1	5.624	PPM
PCE	11	636.2	7.282	PPM

8.4

MCB

STOP 6 701.8  
SAMPLE LIBRARY 1: AFA 10 1024 001  
ANALYST: 6 100 STD  
INTERNAL TEMP: 10 WATER  
GAIN: 10 1000.0 IN.

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN 1 32.2 1.5 US

**PHOTOVAC**

1 COMPOUND ID # R.T. LIMIT

IND	1	32.2	1000.0	PPM
T-DCE	2	21.0	1000.0	PPM
C-DCE	3	116.6	1000.0	PPM
TCE	4	142.1	1000.0	PPM
TOLUENE	5	431.1	1000.0	PPM
PCE	6	632.6	1000.0	PPM

**PHOTOVAC**

START ..... 8.17

8.2

8.18

MCB

STOP 6 774.8  
SAMPLE LIBRARY 1: AFA 10 1024 001  
ANALYST: 6 100 STD  
INTERNAL TEMP: 10 WATER  
GAIN: 10 1000.0 IN.

COMPOUND NAME PEAK R.T. AREA/PPM

Toluene	1	32.3	8.800	PPM
UNKNOWN	2	42.3	3.3	US
UNKNOWN	3	58.1	3.0	US
T-DCE	4	50.0	12.21	PPM
C-DCE	6	115.6	8.961	PPM
UNKNOWN	7	122.8	1.4	US
TCE	9	243.0	8.117	PPM
TOLUENE	10	431.1	5.743	PPM
PCE	11	631.9	8.105	PPM

**PHOTOVAC**

START ..... 8.1

8.12

8.13

MCB

STOP 6 212.3  
SAMPLE LIBRARY 1: AFA 10 1024 001  
ANALYST: 6 100 STD  
INTERNAL TEMP: 10 WATER  
GAIN: 10 1000.0 IN.

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	32.4	1.1	US
UNKNOWN	2	42.2	3.2	US
UNKNOWN	3	58.5	3.0	US
UNKNOWN	4	50.2	3.4	US
UNKNOWN	6	116.5	1.6	US
UNKNOWN	7	123.6	1.2	US
UNKNOWN	9	245.1	2.6	US
UNKNOWN	10	435.3	1.6	US
UNKNOWN	11	636.2	1.6	US

**PHOTOVAC**

CALIBRATED PEAK S.T.C.E.

SAMPLE LIBRARY 1: AFA 10 1024 001  
ANALYST: 6 100 STD  
INTERNAL TEMP: 10 WATER  
GAIN: 10 1000.0 IN.

COMPOUND NAME PEAK R.T. AREA/PPM

Toluene	1	32.3	8.800	PPM
UNKNOWN	2	42.3	3.3	US
UNKNOWN	3	58.1	3.0	US
T-DCE	4	50.0	12.21	PPM
C-DCE	6	115.6	8.961	PPM
UNKNOWN	7	122.8	1.4	US
TCE	9	243.0	8.117	PPM
TOLUENE	10	431.1	5.743	PPM
PCE	11	631.9	8.105	PPM

**PHOTOVAC**

1 COMPOUND ID # R.T. LIMIT

IND	1	32.3	1000.0	PPM
T-DCE	2	28.5	1000.0	PPM
C-DCE	3	115.6	1000.0	PPM
TCE	4	245.0	1000.0	PPM
TOLUENE	5	431.1	1000.0	PPM
PCE	6	632.6	1000.0	PPM

# PHOTOVAC

START .....  
  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 STOP 8 812.6

SAMPLE LIBRARY : APR 14 1994 16:12  
 ANALYSIS # 18 MC-B-20  
 INTERNAL TEMP 20 SOIL  
 OSMN 18 730 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
 UNKNOWN 1 21.2 0.8 US  
 UNKNOWN 2 65.2 6.4 US  
 UNKNOWN 3 82.0 122.4 US  
 C-DCE 4 104.6 1.887 PPM  
 UNKNOWN 5 110.4 361.8 PPM  
 UNKNOWN 6 124.4 224.7 PPM  
 TCE 7 227.0 0.009 PPM  
 PCE 8 565.7 0.262 PPM

# PHOTOVAC

START .....  
  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 STOP 8 812.6

*MCB*  
 SAMPLE LIBRARY : APR 14 1994 16:12  
 ANALYSIS # 18 MC-B-20  
 INTERNAL TEMP 20 SOIL  
 OSMN 18 730 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
 UNKNOWN 1 38.2 422.1 PPM  
 UNKNOWN 2 65.0 11.5 US  
 C-DCE 3 104.6 1.883 PPM  
 TCE 4 216.0 14.43 PPM  
 PCE 5 565.3 0.355 PPM

# PHOTOVAC

START .....  
  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 STOP 8 783.5

*MCB*  
 SAMPLE LIBRARY : APR 14 1994 16:12  
 ANALYSIS # 18 MC-B-20  
 INTERNAL TEMP 20 SOIL  
 OSMN 18 730 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
 UNKNOWN 1 31.0 283.3 PPM  
 UNKNOWN 2 46.2 111.2 PPM  
 UNKNOWN 3 56.5 1.6 US  
 UNKNOWN 4 64.2 2.2 US  
 UNKNOWN 5 87.5 195.6 PPM  
 CHCl3 6 102.1 11.56 PPM  
 CS 7 121.0 0.025 PPM  
 TOLUENE 8 131.1 1.154 PPM  
 PCE 9 366.8 0.204 PPM

# PHOTOVAC

START .....  
  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 STOP 8 836.6

*MCB*  
 SAMPLE LIBRARY : APR 14 1994 16:12  
 ANALYSIS # 18 MC-B-20  
 INTERNAL TEMP 20 SOIL  
 OSMN 18 730 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

# PHOTOVAC

START .....  
  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 STOP 8 783.3

*MCB*  
 SAMPLE LIBRARY : APR 14 1994 16:12  
 ANALYSIS # 18 MC-B-20  
 INTERNAL TEMP 20 SOIL  
 OSMN 18 730 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN 1 38.4 1.5 US

UNKNOWN 2 126.0 124.8 PPM

# PHOTOVAC

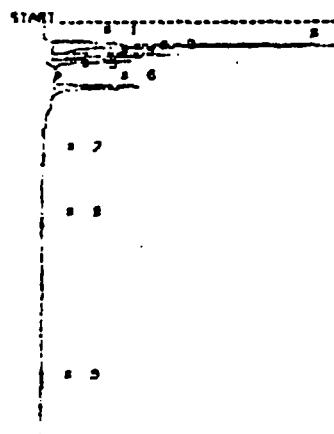
START .....  
  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 STOP 8 833.0

*MCB*  
 SAMPLE LIBRARY : APR 14 1994 16:12  
 ANALYSIS # 18 MC-B-20  
 INTERNAL TEMP 20 REANALYSIS  
 OSMN 18 730 UL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN 1 37.1 0 0.00 PPM  
 UNKNOWN 2 39.2 1.5 0 PPM  
 UNKNOWN 3 42.2 1.77 0 PPM  
 UNKNOWN 4 52.1 1.9 0.6  
 UNKNOWN 5 64.2 3.1 0.6  
 UNKNOWN 6 89.3 203.5 PPM  
 C-DCE 7 185.7 11.88 PPM  
 TCE 8 219.6 0.918 PPM

# PHOTOVAC



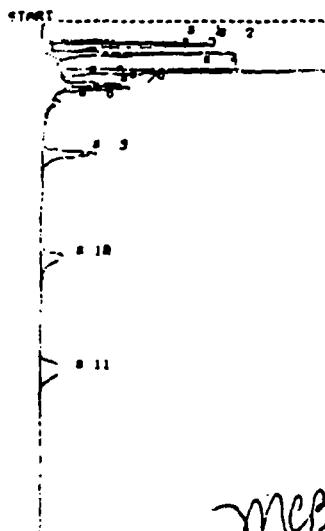
STOP 8 246.4  
SAMPLE LIBRARY: APR 14 1994 12123  
ANALYST: 6 14 MP-14-26  
INTERNAL TEMP: 21 SOIL  
GAIN: 10 750 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	21.6	942.9	MUS
UNKNOWN	2	39.1	4.9	US
UNKNOWN	3	54.2	7.1	US
UNKNOWN	4	64.8	1.1	US
UNKNOWN	5	97.2	100.0	MUS
C-DCE	6	126.9	10.38	PPB
UNKNOWN	7	221.4	174.1	MUS
PCE	8	274.3	0.900	PPB

*MCB*

# PHOTOVAC



STOP 8 815.3  
SAMPLE LIBRARY: APR 14 1994 12123  
ANALYST: 6 14 MP-14-26  
INTERNAL TEMP: 21 SOIL  
GAIN: 10 750 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

TCE	1	22.2	8.002	PPB
UNKNOWN	2	39.0	2.7	US
UNKNOWN	3	54.1	2.7	US
C-DCE	4	62.6	0.657	PPB
L-DCE	5	105.1	2.031	PPB
C-DCE	6	116.8	0.950	PPB
UNKNOWN	7	134.8	102.7	MUS
TCE	8	156.8	2.124	PPB
TOLUENE	9	260.0	4.741	PPB
PCE	10	260.8	8.018	PPB

*MCB*

# PHOTOVAC

COMPOUND	ID #	R.T.	LIMIT
IM	1	23.4	1000. PPB
T-OCE	2	50.2	1000. PPB
C-DCE	3	103.8	1000. PPB
TCE	4	216.0	1000. PPB
TOLUENE	5	361.4	1000. PPB
PCE	6	363.3	1000. PPB

# PHOTOVAC

CHROMATOGRAM

START ..... 8.1

STOP ..... 8.2

PEAKS: 1

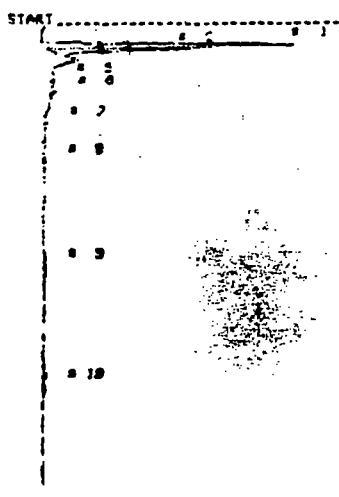
STOP 8 246.3  
SAMPLE LIBRARY: APR 14 1994 12123  
ANALYST: 6 14 MP-14-26  
INTERNAL TEMP: 21 SOIL  
GAIN: 10 750 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

TCE	1	22.2	8.002	PPB
UNKNOWN	2	39.0	2.7	US
UNKNOWN	3	54.1	2.7	US
C-DCE	4	62.6	0.657	PPB
L-DCE	5	105.1	2.031	PPB
C-DCE	6	116.8	0.950	PPB
UNKNOWN	7	134.8	102.7	MUS
TCE	8	156.8	2.124	PPB
TOLUENE	9	260.0	4.741	PPB
PCE	10	260.8	8.018	PPB

*MCB*

# PHOTOVAC



STOP 8 246.3  
SAMPLE LIBRARY: APR 14 1994 12123  
ANALYST: 6 14 MP-14-26  
INTERNAL TEMP: 21 SOIL  
GAIN: 10 750 UL IN

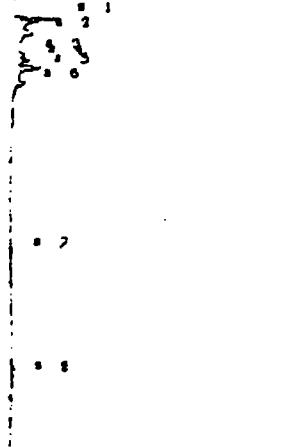
COMPOUND NAME PEAK R.T. AREA/PPM

IM	1	24.3	8.000	PPB
UNKNOWN	2	41.3	2.3	MUS
UNKNOWN	3	68.1	100.0	MUS
PCE	4	368.3	0.317	PPB

*MCB*

**PHOTOVAC**

START.....



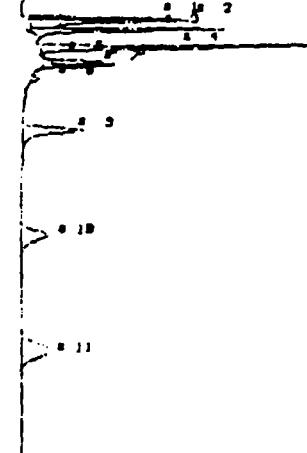
STOP # 852.3  
SAMPLE LIBRARY : APR 14 1994 10:15:44  
ANALYST # 12 REC ACT  
INTERNAL TEMP 20  
GAIN 10 TGS UL INK

COMPOUND NAME PEAK R.T. AREA/PPM  
TCE 1 85.3 2.800 PPM  
UNKNOWN 2 80.8 275.5 PUS  
UNKNOWN 4 103.9 111.8 PUS  
C-DCE 5 112.1 3.223 PPM  
UNKNOWN 6 141.6 140.5 PUS  
PCE 8 620.1 0.926 PPM

*mcb*

**PHOTOVAC**

START.....



STOP # 853.3  
SAMPLE LIBRARY : APR 14 1994 10:15:45  
ANALYST # 12 REC STD  
INTERNAL TEMP 20  
GAIN 10 TGS UL INK

COMPOUND NAME PEAK R.T. AREA/PPM  
TNU 1 85.3 2.820 PPM  
UNKNOWN 2 85.3 0.3 US  
UNKNOWN 3 84.3 2.8 US  
UNKNOWN 4 87.3 4.6 US  
UNKNOWN 6 102.3 822.6 PUS  
UNKNOWN 7 112.3 18.16 PPM  
UNKNOWN 8 126.6 175.4 PUS  
UNKNOWN 9 221.4 0.1 US  
UNKNOWN 10 281.2 1.5 US  
UNKNOWN 11 325.6 0.2 US

*mcb*

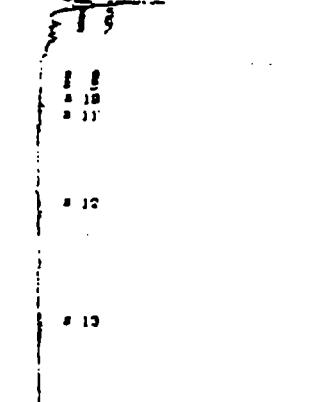
**PHOTOVAC**

: COMPOUND ID & R.T. LIST

TNU	1	84.3 1000. PPM
T-DCE	2	87.3 1828. PPM
C-DCE	3	103.3 1802. PPM
TCE	4	112.3 1000. PPM
TOLUENE	5	131.3 1000. PPM
PCE	6	325.6 1828. PPM

**PHOTOVAC**

START.....



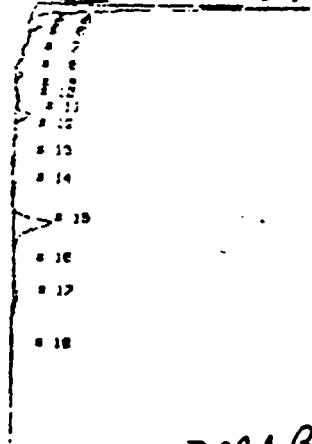
STOP # 762.3  
SAMPLE LIBRARY : APR 14 1994 10:15:45  
ANALYST # 12 REC ACT  
INTERNAL TEMP 20  
GAIN 10 TGS UL INK

COMPOUND NAME PEAK R.T. AREA/PPM  
TNU 1 84.3 0.800 PPM  
UNKNOWN 2 41.3 3.1 US  
UNKNOWN 3 84.3 1.0 US  
UNKNOWN 4 68.1 113.2 PUS  
UNKNOWN 5 98.4 153.2 PUS  
UNKNOWN 7 112.3 182.2 PUS  
TCE 10 223.6 8.128 PPM  
TOLUENE 12 986.2 8.122 PPM  
PCE 13 325.6 0.826 PPM

*mcb*

**PHOTOVAC**

START.....



STOP # 772.2  
SAMPLE LIBRARY : APR 14 1994 10:15:49  
ANALYST # 12 REC ACT  
INTERNAL TEMP 20  
GAIN 10 TGS UL INK

COMPOUND NAME PEAK R.T. AREA/PPM  
TNU 1 85.3 0.800 PPM  
UNKNOWN 2 50.3 1.0 US  
UNKNOWN 3 55.3 2.3 US  
UNKNOWN 4 55.3 138.0 PUS  
UNKNOWN 6 103.3 151.4 PUS  
TCE 11 223.4 1.326 PPM  
UNKNOWN 14 313.5 123.0 PUS  
TOLUENE 15 405.0 8.273 PPM  
UNKNOWN 17 518.2 302.4 PUS  
PCE 18 355.0 1.000 PPM

*mcb*

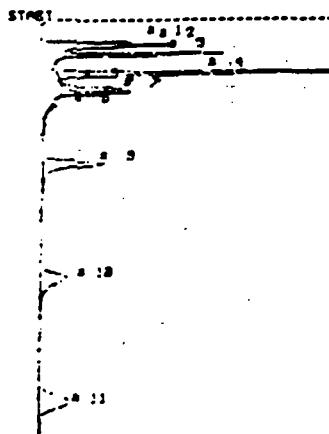
**PHOTOVAC**

CALIBRATED PEAK 8-TCE

SAMPLE LIBRARY : APR 14 1994 10:15:45  
ANALYST # 12 REC STD  
INTERNAL TEMP 20  
GAIN 10 TGS UL INK

COMPOUND NAME PEAK R.T. AREA/PPM  
TNU 1 85.3 0.800 PPM  
UNKNOWN 2 55.3 0.3 US  
UNKNOWN 3 54.3 2.8 US  
T-DCE 4 83.2 18.16 PPM  
C-DCE 6 103.3 2.401 PPM  
UNKNOWN 7 112.3 1.1 US  
UNKNOWN 8 136.8 175.4 PUS  
TCE 9 221.4 6.380 PPM  
TOLUENE 10 311.2 5.365 PPM  
PCE 11 325.6 0.713 PPM

**PHOTOVAC**



STOP 8 884.0  
SAMPLE LIBRARY 1 APP 14 1334 8-12  
ANALYSIS 8 884.0 PPS  
INTERNAL TEMP 20 °C  
SPAN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

IN	1	36.6	8.000	PPB
UNKNOWN	2	41.7	230.0	PUS
UNKNOWN	3	57.1	1.1	US
TCE	4	88.3	11.36	PPB
C-DCE	6	113.8	8.145	PPB
C-DCE	7	118.6	11.36	PPB
UNKNOWN	8	145.2	106.2	PUS
TCE	9	232.6	2.633	PPB
TOLUENE	10	421.3	6.106	PPB
PCE	11	628.7	2.616	PPB

**PHOTOVAC**

CALIBRATED PEAK 9. TCE

SAMPLE LIBRARY 1 APP 14 1334 8-12  
ANALYSIS 9 884.0 PPS  
INTERNAL TEMP 20 °C  
SPAN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

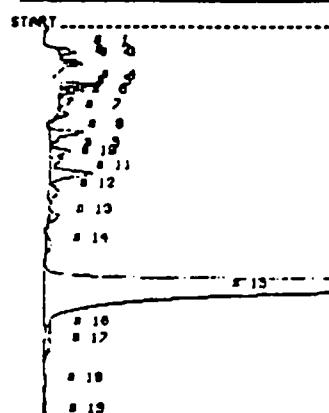
IN	1	36.6	8.000	PPB
UNKNOWN	2	41.7	230.0	PUS
UNKNOWN	3	57.1	1.1	US
T-DCE	4	88.3	11.36	PPB
C-DCE	6	113.8	8.145	PPB
UNKNOWN	7	118.6	11.36	PPB
UNKNOWN	8	145.2	106.2	PUS
TCE	9	232.6	2.633	PPB
TOLUENE	10	421.3	6.106	PPB
PCE	11	628.7	2.616	PPB

**PHOTOVAC**

3 COMPOUND ID # R.T. LIMIT

IN	1	36.6	1000.	PP
T-DCE	2	88.3	1000.	PP
C-DCE	3	113.8	1000.	PPB
TCE	4	232.6	1000.	PPB
TOLUENE	5	421.3	1000.	PPB
PCE	6	628.7	1000.	PPB

**PHOTOVAC**



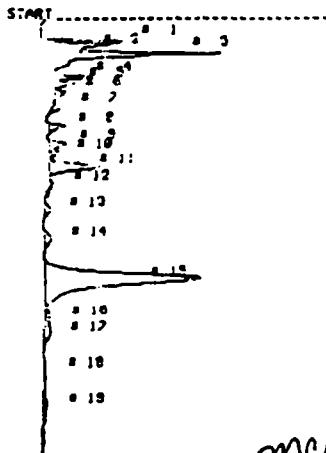
STOP 8 884.4  
SAMPLE LIBRARY 1 APP 14 1334 8-12  
ANALYSIS 8 884.4 PPS  
INTERNAL TEMP 20 °C  
SPAN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	47.1	420.0	PUS
UNKNOWN	2	56.7	166.0	PUS
UNKNOWN	3	61.7	264.3	PUS
UNKNOWN	4	76.1	288.3	PUS
UNKNOWN	5	100.0	474.0	PUS
UNKNOWN	6	128.0	434.7	PUS
UNKNOWN	7	144.0	381.0	PUS
UNKNOWN	8	174.2	1.1	US
UNKNOWN	9	204.0	256.0	PUS
UNKNOWN	10	217.2	522.0	PUS
TCE	11	240.0	5.000	PPB
UNKNOWN	12	268.0	573.2	PUS
UNKNOWN	13	292.0	388.2	PUS
UNKNOWN	14	325.0	322.3	PUS
TOLUENE	15	410.0	372.0	PPB
UNKNOWN	16	494.0	415.0	PUS
UNKNOWN	17	512.2	465.4	PUS
PCE	18	622.0	8.687	PPB

-MCB

**PHOTOVAC**



OS - offscale - use  
results from  
recalibration

STOP 8 788.5  
SAMPLE LIBRARY 1 APP 14 1334 12-12  
ANALYSIS 8 788.5 PPS  
INTERNAL TEMP 20 °C  
SPAN 10 250 UL IN

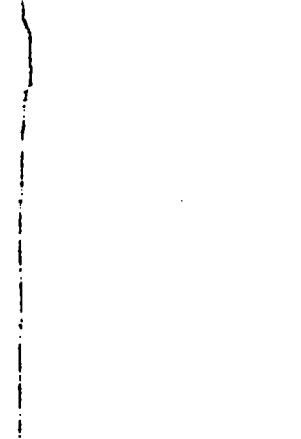
COMPOUND NAME PEAK R.T. AREA/PPM

IN	1	36.2	8.000	PPB
UNKNOWN	3	50.1	2.4	US
UNKNOWN	4	54.8	484.3	PUS
UNKNOWN	5	104.5	287.3	PUS
C-DCE	6	117.2	2.104	PPB
UNKNOWN	7	142.4	261.1	PUS
UNKNOWN	8	172.2	573.0	PUS
UNKNOWN	9	200.4	363.0	PUS
UNKNOWN	10	214.2	356.6	PUS
TCE	11	232.0	5.000	PPB
UNKNOWN	13	305.1	219.1	PUS
UNKNOWN	14	351.1	437.0	PUS
TOLUENE	15	410.0	37.00	PPB
UNKNOWN	16	472.2	481.2	PP
UNKNOWN	17	504.4	479.3	PP
PCE	18	615.0	1.182	PPB

-MCB

**PHOTOVAC**

START -----

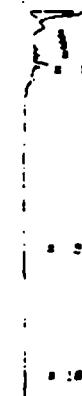


STOP 8 845.3  
SAMPLE LIBRARY 1 APR 14 1994 8453  
ANALYSIS # 2 ROOM AIR  
INTERNAL TEMP 18  
GAIN 10  
COMPOUND NAME PEAK R.T. AREA/PPM

mcb

**PHOTOVAC**

START -----



STOP 8 761.6  
SAMPLE LIBRARY 1 APR 14 1994 8453  
ANALYSIS # 3 ROOM AIR  
INTERNAL TEMP 18  
GAIN 10 250 UL IN  
COMPOUND NAME PEAK R.T. AREA/PPM

mcb

**PHOTOVAC**

CALIBRATED PEAK 10, TCE

SAMPLE LIBRARY 1 APR 14 1994 8453  
ANALYSIS # 4 ROOM AIR  
INTERNAL TEMP 18  
GAIN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

Toluene	2	36.2	8.900	PPB
UNKNOWN	3	42.1	489.0	PPB
UNKNOWN	4	52.3	1.7	US
T-DCE	5	85.2	10.24	PPB
C-DCE	7	114.1	8.251	PPB
UNKNOWN	8	128.8	1.1	US
TCE	10	235.5	2.546	PPB
TOLUENE	11	426.2	2.224	PPB
PCE	12	625.5	8.240	PPB

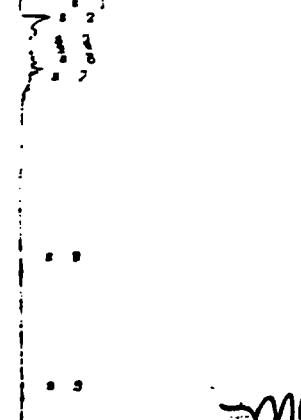
**PHOTOVAC**

COMPOUND ID & R.T. LIMIT

Toluene	1	36.2	1000	PPB
T-DCE	2	42.1	1000	PPB
C-DCE	3	52.3	1000	PPB
TCE	4	85.2	1000	PPB
TOLUENE	5	114.1	1000	PPB
PCE	6	128.8	1000	PPB

**PHOTOVAC**

START -----



STOP 8 683.2  
SAMPLE LIBRARY 1 APR 14 1994 8453  
ANALYSIS # 2 ROOM AIR  
INTERNAL TEMP 18  
GAIN 10 250 UL IN

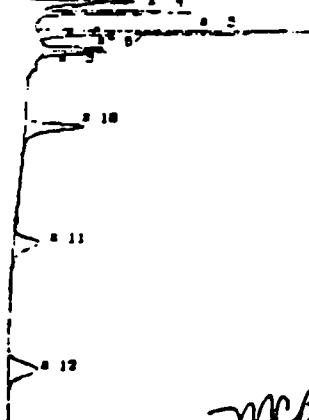
COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	6	123.2	244.0	PPB
UNKNOWN	9	635.1	131.0	PPB

mcb

**PHOTOVAC**

START -----



STOP 8 763.1  
SAMPLE LIBRARY 1 APR 14 1994 8453  
ANALYSIS # 4 ROOM AIR  
INTERNAL TEMP 18  
GAIN 10 250 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	2	36.2	104.3	PPB
UNKNOWN	3	42.1	489.0	PPB
UNKNOWN	4	52.3	1.7	US
UNKNOWN	5	85.2	9.0	US
UNKNOWN	7	114.1	348.4	PPB
UNKNOWN	8	128.8	1.1	US
UNKNOWN	10	235.5	2.4	US
UNKNOWN	11	426.2	1.3	US
UNKNOWN	12	625.5	2.8	US

mcb

# PHOTOVAC

1 COMPOUND ID # R.T. (MIN)  
INN 1 34.8 1880. PPM  
T-CCE 2 41.0 1880. PPM  
C-CCE 3 189.3 1880. PPM  
TCE 4 222.6 1880. PPM  
TOLUENE 5 228.4 1880. PPM  
PCB 6 381.8 1880. PPM

# PHOTOVAC

START ..... 1 18 2

# PHOTOVAC

START ..... 1 18 2

# PHOTOVAC

START ..... 1 18 2

*mcb*

STOP # 248.4  
SAMPLE LIBRARY : APR 12 1994 10410  
ANALYSIS # 18 1880.1 PPM  
INTERNAL TEMP 20  
O/D# 18 0.02 0.01 0.04

COMPOUND NAME PEAK R.T. (MIN) PPM  
UNKNOWN 2 381.8 227.0 PPM  
UNKNOWN 3 65.7 225.0 PPM

*mcb*

STOP # 102.6  
SAMPLE LIBRARY : APR 12 1994 10410  
ANALYSIS # 18 1880.1 PPM  
INTERNAL TEMP 20  
O/D# 18 0.02 0.01 0.04

COMPOUND NAME PEAK R.T. (MIN) PPM  
UNKNOWN 1 31.9 182.2 PPM  
UNKNOWN 2 39.0 241.3 PPM  
UNKNOWN 3 55.1 650.2 PPM  
UNKNOWN 4 65.7 388.2 PPM

# PHOTOVAC

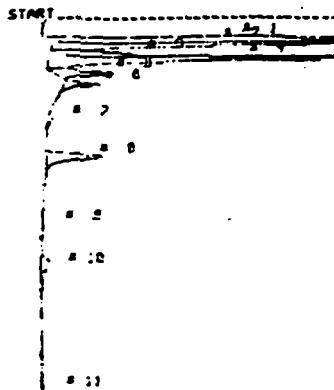
START .....  
STOP # 5.3  
SAMPLE LIBRARY : APR 12 1994 10410  
ANALYSIS # 18 1880.1 PPM  
INTERNAL TEMP 20  
O/D# 18 0.02 0.01 0.04

COMPOUND NAME PEAK R.T. (MIN) PPM

STOP # 204.4  
SAMPLE LIBRARY : APR 12 1994 10410  
ANALYSIS # 18 1880.1 PPM  
INTERNAL TEMP 20  
O/D# 18 0.02 0.01 0.04

COMPOUND NAME PEAK R.T. (MIN) PPM  
INN 1 35.9 8.862 PPM  
UNKNOWN 2 48.1 3.2 US  
UNKNOWN 3 55.3 2.5 US  
T-CCE 4 85.1 8.849 PPM  
C-CCE 6 108.1 6.872 PPM  
UNKNOWN 7 114.1 984.1 PPM  
UNKNOWN 8 128.8 134.1 PPM  
TCE 9 222.6 4.964 PPM  
TOLUENE 10 228.2 9.742 PPM  
PCB 11 386.3 5.482 PPM

# PHOTOVAC

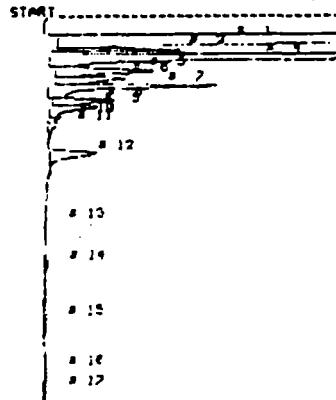


STOP 8 746.5  
SAMPLE LIBRARY 1 APR 13 1994 16141  
ANALYSIS # 24 RT-1750  
INTERNAL TEMP 20 °C  
GAIN 10 250 UL JNU

COMPOUND NAME	PEAK	R.T.	AREA/PPB
INN	1	34.8	0.000 PPB
UNKNOWN	2	41.2	7.2 US
UNKNOWN	3	59.5	2.3 US
UNKNOWN	4	65.7	10.9 US
UNKNOWN	5	80.1	1.6 US
UNKNOWN	6	102.1	1.0 US
C-CCE	7	114.2	0.300 PPB
TCE	8	135.2	0.010 PPB
TOLUENE	10	160.3	1.078 PPB
PCB	11	201.3	0.369 PPB

*MCB*

# PHOTOVAC

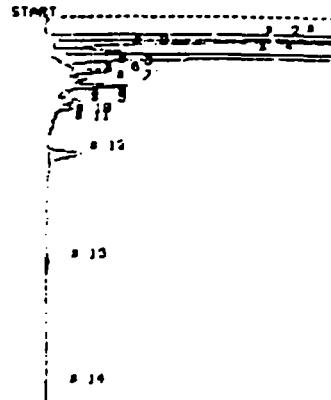


STOP 8 715.2  
SAMPLE LIBRARY 1 APR 13 1994 16141  
ANALYSIS # 24 RT-1750  
INTERNAL TEMP 20 °C  
GAIN 10 250 UL JNU

COMPOUND NAME	PEAK	R.T.	AREA/PPB
UNKNOWN	1	32.6	62.4 US
UNKNOWN	2	55.2	1.6 US
UNKNOWN	3	59.3	1.7 US
UNKNOWN	4	66.3	16.3 US
UNKNOWN	5	80.7	3.1 US
UNKNOWN	6	102.1	2.0 US
UNKNOWN	7	114.2	4.1 US
UNKNOWN	8	135.2	1.6 US
UNKNOWN	9	148.8	1.5 US
UNKNOWN	10	165.2	331.8 PPB
UNKNOWN	11	176.2	310.9 PPB
TCE	12	225.6	5.242 PPB
TOLUENE	14	336.2	0.616 PPB
UNKNOWN	15	484.9	102.8 PPB

*MCB*

# PHOTOVAC



STOP 8 758.6  
SAMPLE LIBRARY 1 APR 13 1994 16141  
ANALYSIS # 24 RT-1750  
INTERNAL TEMP 20 °C  
GAIN 10 250 UL JNU

COMPOUND NAME	PEAK	R.T.	AREA/PPB
INN	1	33.4	0.000 PPB
UNKNOWN	2	49.2	6.2 US
UNKNOWN	3	53.1	1.6 US
UNKNOWN	4	62.5	10.1 US
UNKNOWN	5	80.1	832.8 PPB
UNKNOWN	6	101.6	221.2 PPB
UNKNOWN	7	114.2	726.0 PPB
UNKNOWN	8	138.8	407.2 PPB
UNKNOWN	9	148.4	372.1 PPB
TCE	12	225.8	3.512 PPB
TOLUENE	13	337.2	0.921 PPB

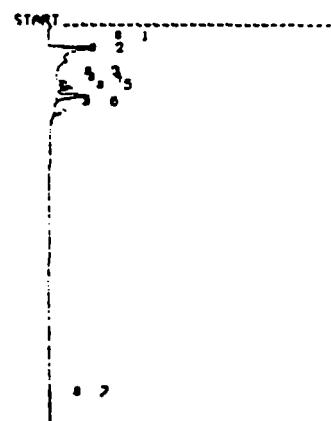
*MCB*

# PHOTOVAC

CALIBRATED PEAK 12, TCE  
SAMPLE LIBRARY 1 APR 13 1994 16141  
ANALYSIS # 24 RT-1750  
INTERNAL TEMP 20 °C  
DATA 10 250 UL JNU

COMPOUND NAME	PEAK	R.T.	AREA/PPB
UNKNOWN	1	32.6	62.4 US
UNKNOWN	2	55.2	1.6 US
UNKNOWN	3	59.3	1.7 US
UNKNOWN	4	66.3	16.3 US
UNKNOWN	5	80.7	3.1 US
UNKNOWN	6	102.1	2.0 US
UNKNOWN	7	114.2	4.1 US
UNKNOWN	8	135.2	1.6 US
UNKNOWN	9	148.8	1.5 US
UNKNOWN	10	165.2	331.8 PPB
UNKNOWN	11	176.2	310.9 PPB
TCE	12	225.6	5.242 PPB
TOLUENE	14	336.2	0.616 PPB
UNKNOWN	15	484.9	102.8 PPB

# PHOTOVAC

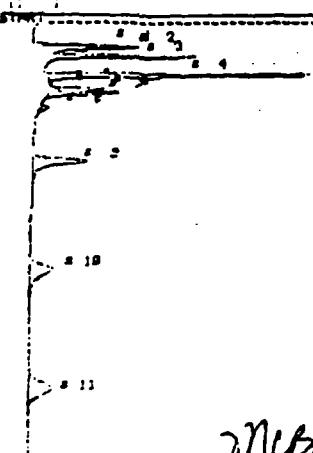


STOP 8 677.1  
SAMPLE LIBRARY 1 APR 13 1994 17142  
ANALYSIS # 26 ROOT AIR  
INTERNAL TEMP 20 °C  
GAIN 10 250 UL JNU

COMPOUND NAME	PEAK	R.T.	AREA/PPB
INN	1	33.8	0.000 PPB
UNKNOWN	4	181.9	153.9 PPB
UNKNOWN	5	114.1	538.8 PPB
UNKNOWN	6	138.8	248.0 PPB

*MCB*

# PHOTOVAC



STOP 6 632.6  
SAMPLE LIBRARY 1 APR 10 2004 14:15  
ANALYSIS #: 01 LCL STD  
INTERNAL TEMP: 50  
DATE: 10 2004 14:15

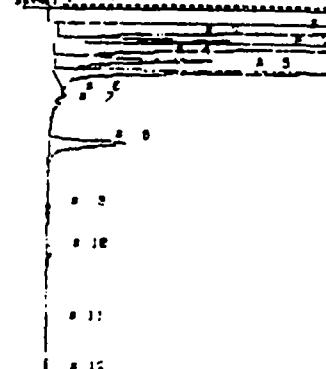
COMPOUND NAME PEAK R.T. AREA/PPM

INN	1	36.1	0.000	PPB
UNKNOWN	2	48.9	465.0	MUS
UNKNOWN	3	55.7	1.6	US
UNKNOWN	4	85.6	4.0	US
UNKNOWN	6	182.3	812.4	MUS
C-DCE	7	115.0	10.00	PPB
UNKNOWN	8	138.6	149.0	MUS
UNKNOWN	9	212.4	1.9	US
UNKNOWN	10	321.0	1.2	US
UNKNOWN	11	332.3	1.7	US

# PHOTOVAC

COMPOUND	ID #	R.T.	LIMIT
INN	1	35.1	1000. PPB
T-DCE	2	84.2	1000. PPB
C-DCE	3	108.3	1000. PPB
TCE	4	117.4	1000. PPB
TOLUENE	5	163.0	1000. PPB
PCE	6	321.0	1000. PPB

# PHOTOVAC



STOP 6 722.6  
SAMPLE LIBRARY 1 APR 10 2004 14:15  
ANALYSIS #: 01 LCL STD  
INTERNAL TEMP: 50  
DATE: 10 2004 14:15

COMPOUND NAME PEAK R.T. AREA/PPM

INN	1	36.1	0.000	PPB
UNKNOWN	2	50.9	3.4	US
UNKNOWN	3	66.3	10.8	US
UNKNOWN	4	80.1	4.2	US
C-DCE	5	102.6	66.21	PPB
TCE	6	225.6	8.862	PPB
TOLUENE	10	338.2	0.774	PPB
PCE	12	339.0	0.773	PPB

# PHOTOVAC

CALIBRATED PEAK 9. TCE  
SAMPLE LIBRARY 1 APR 10 2004 14:15  
ANALYSIS #: 01 LCL STD  
INTERNAL TEMP: 50  
DATE: 10 2004 14:15

COMPOUND NAME PEAK R.T. AREA/PPM

INN	1	36.1	0.000	PPB
UNKNOWN	2	48.9	465.0	MUS
UNKNOWN	3	55.7	1.6	US
T-DCE	4	83.6	8.000	PPB
C-DCE	6	182.3	121.0	PPB
UNKNOWN	7	218.0	1.1	US
UNKNOWN	8	320.0	10.0	PPB
TCE	9	225.6	8.862	PPB
TOLUENE	10	338.2	0.774	PPB
PCE	11	339.0	0.773	PPB

STOP 6 747.4  
SAMPLE LIBRARY 1 APR 10 2004 14:15  
ANALYSIS #: 01 LCL STD  
INTERNAL TEMP: 50  
DATE: 10 2004 14:15

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	31.8	1.3	US
UNKNOWN	2	39.9	2.2	US
UNKNOWN	3	52.7	670.0	MUS
UNKNOWN	4	66.6	19.3	US
T-DCE	5	85.3	17.03	PPB
C-DCE	6	108.7	148.4	PPB
UNKNOWN	7	138.0	336.0	MUS
TCE	8	216.2	33.63	PPB
TOLUENE	11	401.4	12.22	PPB
PCE	12	330.0	5.467	PPB

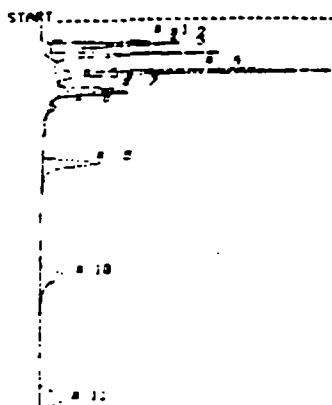
# PHOTOVAC

SAMPLE LIBRARY 1 APR 10 2004 14:15  
ANALYSIS #: 01 LCL STD  
INTERNAL TEMP: 50  
DATE: 10 2004 14:15

COMPOUND NAME PEAK R.T. AREA/PPM

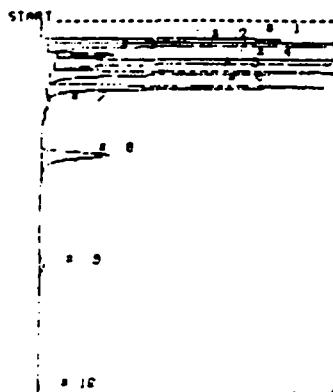
INN	1	36.1	0.000	PPB
UNKNOWN	2	50.9	3.4	US
UNKNOWN	3	66.3	10.8	US
UNKNOWN	4	80.1	4.2	US
C-DCE	5	102.6	66.21	PPB
TCE	6	225.6	8.862	PPB
TOLUENE	10	338.2	0.774	PPB
PCE	12	339.0	0.773	PPB

x 2.5

**PHOTOVAC**

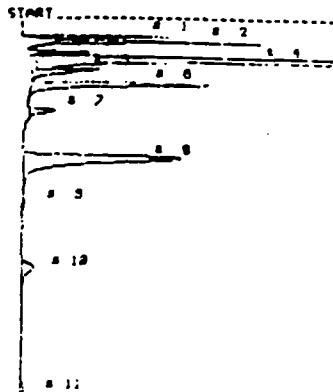
STOP 6 218.5  
SAMPLE LIBRARY : APR 13 1334 J4-18  
ANALYSIS # 18 MP-10-18  
INTERNAL TEMP 20 REANALYSIS  
BAKIN 2 100 LC INR

COMPOUND NAME	PEAK R.T.	AREA/PPM
TIN	1	36.2 2.820 PPM
UNKNOWN	2	40.3 2.6 US
UNKNOWN	3	55.3 2.4 US
T-DCE	4	62.4 2.782 PPM
C-DCE	5	110.5 2.818 PPM
UNKNOWN	6	143.2 120.8 PPM
TCE	7	224.4 4.583 PPM
TOLUENE	8	412.9 5.124 PPM
PCB	9	614.2 6.124 PPM

*MCB***PHOTOVAC**

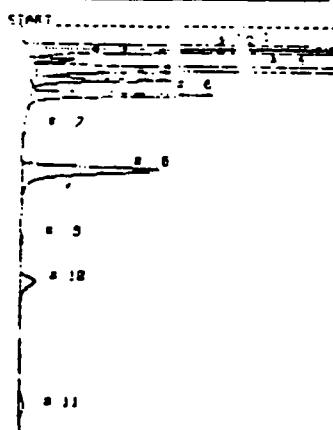
STOP 6 633.2  
SAMPLE LIBRARY : APR 13 1334 J4-18  
ANALYSIS # 18 MP-10-18  
INTERNAL TEMP 20 REANALYSIS  
BAKIN 2 100 LC INR

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	32.1 3.3 US
UNKNOWN	2	48.1 8.1 US
UNKNOWN	3	52.2 1.3 US
UNKNOWN	4	66.8 15.4 US
T-DCE	5	86.4 20.92 PPM <i>dt</i>
C-DCE	6	110.6 25.71 PPM <i>dt</i>
TCE	7	222.2 15.68 PPM
TOLUENE	8	412.4 2.622 PPM
PCB	9	602.2 0.393 PPM

*MCB***PHOTOVAC**

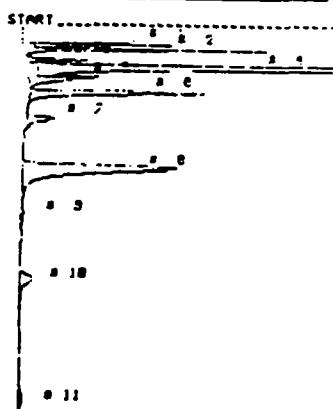
STOP 6 231.2  
SAMPLE LIBRARY : APR 13 1334 J4-18  
ANALYSIS # 18 MP-10-18  
INTERNAL TEMP 20 REANALYSIS  
BAKIN 2 100 LC INR

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	31.2 832.1 PUS
UNKNOWN	2	35.5 1.5 US
UNKNOWN	3	32.3 642.2 PUS
UNKNOWN	4	66.3 13.6 US
UNKNOWN	5	82.0 1.4 US
UNKNOWN	6	103.6 2.3 US
UNKNOWN	7	151.2 664.4 PUS
UNKNOWN	8	216.6 6.6 US
UNKNOWN	9	196.2 625.3 PUS
UNKNOWN	10	338.3 21.6 PUS

*MCB***PHOTOVAC**

STOP 6 722.1  
SAMPLE LIBRARY : APR 13 1334 J4-18  
ANALYSIS # 18 MP-10-18  
INTERNAL TEMP 20 REANALYSIS  
BAKIN 2 100 LC INR

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	32.3 6.0 US
UNKNOWN	2	48.3 8.3 US
UNKNOWN	3	56.3 311.4 PUS
UNKNOWN	4	62.0 13.0 US
T-DCE	5	86.5 33.86 PPM <i>dt</i>
C-DCE	6	110.5 126.1 PPM <i>dt</i>
TCE	7	221.6 38.85 PPM <i>dt</i>
TOLUENE	8	411.3 14.54 PPM
PCB	9	604.2 2.526 PPM

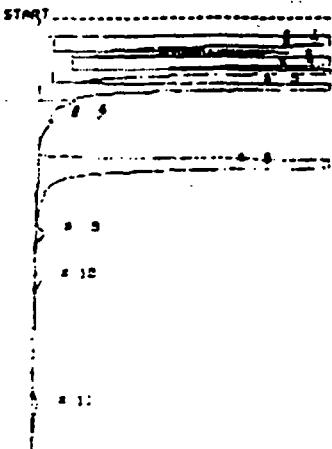
*MCB***PHOTOVAC**

STOP 6 726.6  
SAMPLE LIBRARY : APR 13 1334 J4-18  
ANALYSIS # 18 MP-10-18  
INTERNAL TEMP 20 REANALYSIS  
BAKIN 2 100 LC INR

COMPOUND NAME	PEAK R.T.	AREA/PPM
UNKNOWN	1	32.1 1.1 US
UNKNOWN	2	48.3 2.3 US
UNKNOWN	3	56.3 632.4 PUS
UNKNOWN	4	62.1 20.2 US
T-DCE	5	86.2 16.91 PPM
UNKNOWN	6	103.6 3.2 US
UNKNOWN	7	151.2 616.2 PUS
UNKNOWN	8	226.6 6.6 US
UNKNOWN	9	185.6 603.6 PUS
UNKNOWN	10	336.6 216.9 PUS

*MCB*

PHOTOVAC



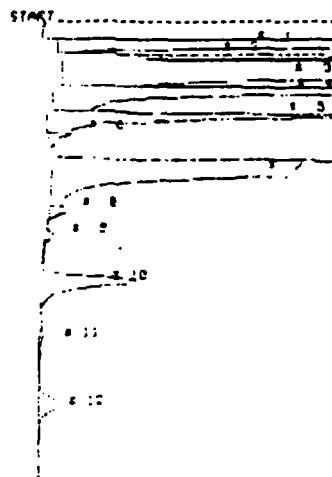
MCB

STOP 6 024.0  
SAMPLE LIBRARY 1 APR 12 1994 10:40  
ANALYST S 12 04-12-94  
INTERNAL TEMP 10 °C  
PUMP 10 220 mL/min

COMPOUND NAME	PEAK RT.	AREA/PPM
TOLUENE	1 52.0	8,000 PPM
UNKNOWN	2 52.1	2.0 US
UNKNOWN	3 28.3	32.0 US
TCEC	4 82.6	33.31 PPM OS
TCEC	5 123.9	764.9 PPM OS
UNKNOWN	6 750.0	388.8 PUS
TOLUENE	7 22.3	1,156 PPM
TCEC	8 121.2	1,462 PPM OS

OS - offscale -  
use reanalysis  
results

PHOTOVAC



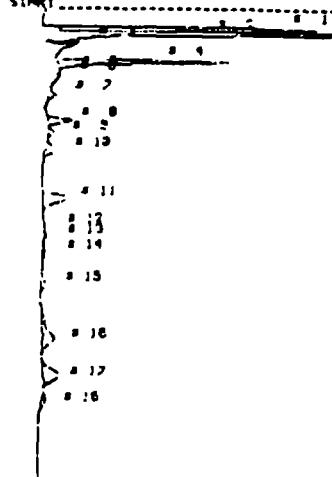
MCB

STOP 6 024.0  
SAMPLE LIBRARY 1 APR 12 1994 10:40  
ANALYST S 12 04-12-94  
INTERNAL TEMP 10 °C  
PUMP 10 220 mL/min

COMPOUND NAME	PEAK RT.	AREA/PPM
TOLUENE	1 52.0	8,000 PPM
UNKNOWN	2 52.1	2.0 US
UNKNOWN	3 28.3	32.0 US
TCEC	4 122.2	221.1 PPM OS
UNKNOWN	5 123.7	12.0 US
UNKNOWN	6 124.3	644.8 PUS
TCE	7 222.3	413.1 PPM OS
UNKNOWN	8 326.3	387.8 PUS
UNKNOWN	9 248.4	229.1 PUS
TOLUENE	10 421.0	28.94 PPM
UNKNOWN	11 510.7	242.8 PUS
TCE	12 610.2	2,466 PPM

OS - offscale -  
use reanalysis  
results

PHOTOVAC

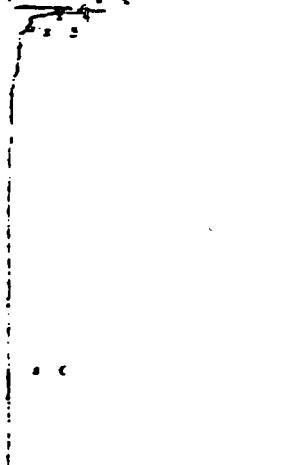


MCB

STOP 6 024.0  
SAMPLE LIBRARY 1 APR 12 1994 10:40  
ANALYST S 12 04-12-94  
INTERNAL TEMP 10 °C  
PUMP 10 220 mL/min

COMPOUND NAME	PEAK RT.	AREA/PPM
UNKNOWN	1 22.0	2.0 US
UNKNOWN	2 30.0	12.2 US
UNKNOWN	3 36.0	314.1 PUS
T-DCE	4 82.2	6,595 PPM
UNKNOWN	5 143.2	193.2 PUS
UNKNOWN	6 185.2	634.4 PUS
UNKNOWN	7 205.0	163.3 PUS
TCE	8 223.4	1,151 PPM
UNKNOWN	9 262.1	1.2 US
TOLUENE	10 444.0	0,555 PPM
UNKNOWN	11 521.1	1.2 US
UNKNOWN	12 533.0	1.0 US
TCE	13 633.0	0,454 PPM

# PHOTOVAC

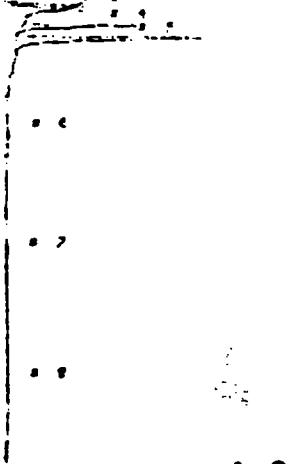
START .....  


mcb

STOP 0 010.3  
SAMPLE LIBRARY : APR 10 1994 10100  
ANALYSIS # 10 APR-9-10  
INTERNAL TEMP 10 °C  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB  
TOLUENE 1 36.4 0.020 PPB  
UNKNOWN 2 40.1 0.019 PPB  
UNKNOWN 4 63.1 0.14 PPB

# PHOTOVAC

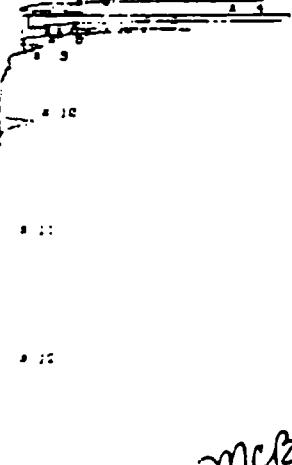
START .....  


mcb

STOP 0 010.7  
SAMPLE LIBRARY : APR 10 1994 10100  
ANALYSIS # 10 APR-9-10  
INTERNAL TEMP 10 °C  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB  
TOLUENE 1 35.9 0.008 PPB  
UNKNOWN 4 68.3 1.4 PPB  
T-OCE 5 88.3 2.172 PPB

# PHOTOVAC

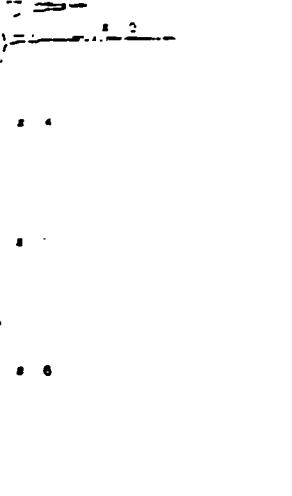
START .....  


mcb

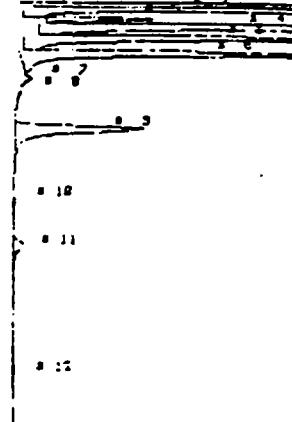
STOP 0 000.4  
SAMPLE LIBRARY : APR 10 1994 10100  
ANALYSIS # 10 APR-9-10  
INTERNAL TEMP 10 °C  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB  
UNKNOWN 1 32.8 1.0 US  
UNKNOWN 2 41.5 1.2 US  
UNKNOWN 3 50.5 20.5 PPB  
UNKNOWN 4 66.4 13.0 US  
T-OCE 5 83.1 2.303 PPB  
C-OCE 6 100.9 1.910 PPB  
UNKNOWN 8 148.8 106.0 PPB  
TCE 10 228.6 4.240 PPB

# PHOTOVAC

START .....  


# PHOTOVAC

START .....  


mcb

STOP 0 000.1  
SAMPLE LIBRARY : APR 10 1994 10100  
ANALYSIS # 10 APR-9-10  
INTERNAL TEMP 10 °C  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB  
UNKNOWN 1 32.3 2.1 US  
UNKNOWN 2 40.9 11.1 US  
UNKNOWN 3 58.7 2.7 US  
UNKNOWN 4 68.6 21.6 US  
T-OCE 5 87.0 21.83 PPB  
C-OCE 6 112.3 125.4 PPB  
UNKNOWN 7 156.0 112.2 PPB  
TCE 9 232.6 15.84 PPB  
TOLUENE 11 424.5 1.328 PPB  
PCE 12 623.9 0.767 PPB

OS - offscale.  
use reanalysis  
results.

OS

OS

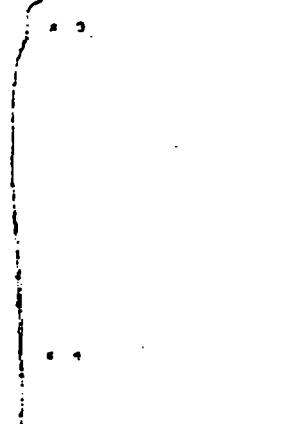
STOP 0 1000.0  
SAMPLE LIBRARY : APR 10 1994 10100  
ANALYSIS # 10 APR-9-10  
INTERNAL TEMP 10 °C  
GAIN 10 250 UL INU

COMPOUND NAME PEAK R.T. AREA/PPB  
UNKNOWN 1 32.8 169.1 PPB  
INU 2 36.3 0.000 PPB  
T-OCE 3 89.3 0.150 PPB

mcb

# PHOTOVAC

START ..... 8.2



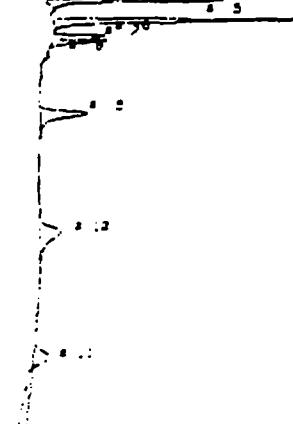
STOP 8 762.0  
SAMPLE LIBRARY 1 APR 13 1994 3149  
ANALYSIS 6 3 FROM AIR  
INTERNAL TEMP 30  
SPIN 10 530 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
Toluene 2 32.4 8,000 PPM  
PCB 4 641.2 9,945 PPM

*mcb*

# PHOTOVAC

START ..... 8.2

*mcb*

STOP 8 762.0  
SAMPLE LIBRARY 1 APR 13 1994 3149  
ANALYSIS 6 3 FROM AIR  
INTERNAL TEMP 30  
SPIN 10 530 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
Toluene 2 32.4 8,000 PPM  
UNKNOWN 3 42.3 2.5 US  
UNKNOWN 4 58.1 2.2 US  
T-DEC 5 50.4 2,764 PPM  
C-DEC 6 115.6 7,642 PPM  
UNKNOWN 7 122.4 1.0 US  
TCE 8 243.0 6,366 PPM  
TOLLENE 10 432.2 5,376 PPM  
PCE 11 639.5 6,459 PPM

*mcb*

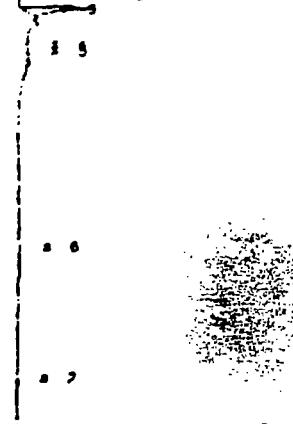
STOP 8 762.1  
SAMPLE LIBRARY 1 APR 13 1994 3149  
ANALYSIS 6 3 FROM AIR  
INTERNAL TEMP 30  
SPIN 10 530 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

Toluene	1	32.4 8,000 PPM
UNKNOWN	2	42.3 368.6 PUS
UNKNOWN	3	58.1 1.8 US
T-DEC	4	50.4 18.25 PPM
C-DEC	6	115.6 6,816 PPM
UNKNOWN	7	122.4 1.0 US
TCE	8	243.0 6,314 PPM
TOLLENE	10	432.2 5,376 PPM
PCE	11	639.5 6,459 PPM

# PHOTOVAC

START ..... 8.1

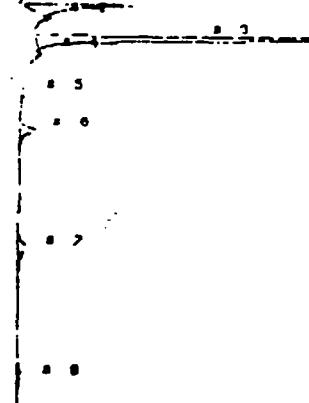
*mcb*

STOP 8 762.0  
SAMPLE LIBRARY 1 APR 13 1994 3149  
ANALYSIS 6 3 FROM AIR  
INTERNAL TEMP 30  
SPIN 10 530 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
Toluene 2 32.4 8,000 PPM

# PHOTOVAC

START ..... 8.1

*mcb*

STOP 8 762.1  
SAMPLE LIBRARY 1 APR 13 1994 3149  
ANALYSIS 6 3 FROM AIR  
INTERNAL TEMP 30  
SPIN 10 530 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM

Toluene	1	32.4 8,000 PPM
T-DEC	3	50.4 22.66 PPM
TCE	6	243.0 1,717 PPM
TOLLENE	7	122.4 1,433 PPM
PCE	8	639.5 8,455 PPM

**PHOTOVAC**

START .....  
  
 1 2  
 2 4  
 3 6  
 4 8  
 5 10  
 6 12  
 7 14  
 8 16  
 9 18  
 10 20  
 11 22  
 12 24  
 13 26  
 14 28  
 15 30  
 16 32  
 17 34  
 18 36  
 19 38  
 20 40  
 21 42  
 22 44  
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 25 50  
 26 52  
 27 54  
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 30 60  
 31 62  
 32 64  
 33 66  
 34 68  
 35 70  
 36 72  
 37 74  
 38 76  
 39 78  
 40 80  
 41 82  
 42 84  
 43 86  
 44 88  
 45 90  
 46 92  
 47 94  
 48 96  
 49 98  
 50 100

**PHOTOVAC**

*McB*  
 START .....  
 STOP 8 1.8  
 SAMPLE LIBRARY : APR 26 1994 10:10  
 ANALYSIS # 1 NO LN  
 INTERNAL TEMP 10  
 OVEN 10 100 °C LN  
 COMPOUND NAME PEAK R.T. AREA/PPM

**PHOTOVAC**

1 COMPOUND ID # R.T. AREA/PPM  
 INI 1 32.4 1000. PPM  
 T-DCE 2 30.3 1000. PPM  
 C-DCE 3 115.3 1000. PPM  
 TCE 4 242.3 1000. PPM  
 TOLUENE 5 430.9 1000. PPM  
 PCE 6 630.3 1000. PPM

*McB*  
 STOP 8 242.0  
 SAMPLE LIBRARY : APR 26 1994 10:10  
 ANALYSIS # 1 NO LN  
 INTERNAL TEMP 10  
 OVEN 10 100 °C LN  
 COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN	1	32.4	1.1	US
UNKNOWN	2	42.3	3.4	US
UNKNOWN	3	58.3	3.2	US
UNKNOWN	4	90.3	4.2	US
UNKNOWN	6	115.3	1.2	US
UNKNOWN	7	122.8	1.1	US
UNKNOWN	8	242.0	3.0	US
UNKNOWN	12	430.9	1.6	US
UNKNOWN	13	630.3	1.3	US

**PHOTOVAC**

START .....  
  
 1 2  
 2 4  
 3 6  
 4 8  
 5 10  
 6 12  
 7 14  
 8 16  
 9 18  
 10 20  
 11 22  
 12 24  
 13 26  
 14 28  
 15 30  
 16 32  
 17 34  
 18 36  
 19 38  
 20 40  
 21 42  
 22 44  
 23 46  
 24 48  
 25 50  
 26 52  
 27 54  
 28 56  
 29 58  
 30 60  
 31 62  
 32 64  
 33 66  
 34 68  
 35 70  
 36 72  
 37 74  
 38 76  
 39 78  
 40 80  
 41 82  
 42 84  
 43 86  
 44 88  
 45 90  
 46 92  
 47 94  
 48 96  
 49 98  
 50 100

**PHOTOVAC**

START .....  
  
 1 2  
 2 4  
 3 6  
 4 8  
 5 10  
 6 12  
 7 14  
 8 16  
 9 18  
 10 20  
 11 22  
 12 24  
 13 26  
 14 28  
 15 30  
 16 32  
 17 34  
 18 36  
 19 38  
 20 40  
 21 42  
 22 44  
 23 46  
 24 48  
 25 50  
 26 52  
 27 54  
 28 56  
 29 58  
 30 60  
 31 62  
 32 64  
 33 66  
 34 68  
 35 70  
 36 72  
 37 74  
 38 76  
 39 78  
 40 80  
 41 82  
 42 84  
 43 86  
 44 88  
 45 90  
 46 92  
 47 94  
 48 96  
 49 98  
 50 100

**PHOTOVAC**

SAMPLE LIBRARY : APR 26 1994 10:10  
 ANALYSIS # 1 NO LN  
 INTERNAL TEMP 10  
 OVEN 10 100 °C LN  
 COMPOUND NAME PEAK R.T. AREA/PPM

INI	1	32.4	0.023	PPB
UNKNOWN	2	42.3	3.4	US
UNKNOWN	3	58.3	3.2	US
T-DCE	4	90.3	18.50	PPB
C-DCE	6	115.3	18.70	PPB
UNKNOWN	7	122.8	1.1	US
TCE	8	242.3	8.150	PPB
TOLUENE	10	430.9	3.000	PPB
PCE	11	630.3	10.14	PPB

*McB*  
 STOP 8 228.4  
 SAMPLE LIBRARY : APR 26 1994 10:10  
 ANALYSIS # 1 NO LN  
 INTERNAL TEMP 10  
 OVEN 10 100 °C LN  
 COMPOUND NAME PEAK R.T. AREA/PPM

STOP 8 868.2  
 SAMPLE LIBRARY : APR 26 1994 10:10  
 ANALYSIS # 1 NO LN  
 INTERNAL TEMP 10  
 OVEN 10 100 °C LN  
 COMPOUND NAME PEAK R.T. AREA/PPM

**PHOTOVAC**

START .....  
.....

STOP 0 762.6  
SAMPLE LIBRARY : APR 12 1994 8:10  
ANALYSIS # 1 ROOM AIR  
INTERNAL TEMP 18  
GAIN 2  
.....

COMPOUND NAME PEAK R.T. AREA/PPT

mcb

**PHOTOVAC**

START .....  
.....

STOP 0 249.3  
SAMPLE LIBRARY : APR 12 1994 8:11  
ANALYSIS # 2 ROOM AIR  
INTERNAL TEMP 18  
GAIN 2 500 UL JNU  
.....

COMPOUND NAME PEAK R.T. AREA/PPT

mcb

**PHOTOVAC**

START .....  
.....

STOP 0 339.3  
SAMPLE LIBRARY : APR 12 1994 8:10  
ANALYSIS # 3 ROOM AIR  
INTERNAL TEMP 18  
GAIN 2 500 UL JNU  
.....

COMPOUND NAME PEAK R.T. AREA/PPT

UNKNOWN 1 38.1 312.1 AUS  
UNKNOWN 2 59.3 148.1 AUS  
UNKNOWN 4 92.2 6.0 US  
UNKNOWN 5 122.1 162.9 US  
UNKNOWN 7 252.6 240.3 US  
UNKNOWN 8 442.3 424.7 US  
UNKNOWN 9 636.7 16.0 US

mcb

**PHOTOVAC**

START .....  
.....

STOP 0 619.3  
SAMPLE LIBRARY : APR 12 1994 8:10  
ANALYSIS # 7 ROOM AIR  
INTERNAL TEMP 18  
GAIN 2 500 UL JNU  
.....

COMPOUND NAME PEAK R.T. AREA/PPT

UNKNOWN 1 39.8 417.7 AUS

mcb

**PHOTOVAC**

START .....  
.....

STOP 0 389.0  
SAMPLE LIBRARY : APR 12 1994 8:11  
ANALYSIS # 8 ROOM AIR  
INTERNAL TEMP 18  
GAIN 2 500 UL JNU  
.....

COMPOUND NAME PEAK R.T. AREA/PPT

UNKNOWN 2 38.8 2.6 US  
UNKNOWN 3 62.3 267.0 AUS  
UNKNOWN 5 125.6 229.3 AUS  
UNKNOWN 8 440.0 251.0 AUS

mcb

**PHOTOVAC**

START .....  
.....

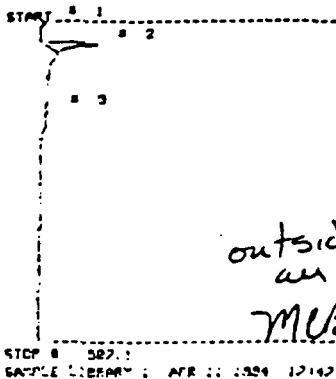
STOP 0 772.9  
SAMPLE LIBRARY : APR 12 1994 8:10  
ANALYSIS # 9 TRANS-DCE  
INTERNAL TEMP 18  
GAIN 2 500 UL JNU  
.....

COMPOUND NAME PEAK R.T. AREA/PPT

UNKNOWN 4 91.4 36.6 AUS  
UNKNOWN 5 115.6 1.2 AUS  
UNKNOWN 7 244.4 221.0 AUS  
UNKNOWN 8 433.5 332.3 AUS  
UNKNOWN 9 636.7 163.8 AUS

mcb

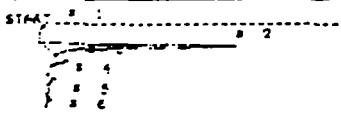
# PHOTOVAC



STOP 0 307.1  
SAMPLE LIBRARY 1 APR 11 1994 10149  
ANALYSIS 8 1 AIR BLANK  
INTERNAL TEMP 20  
GAIN 10 500 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 2 307.1 1.2 US

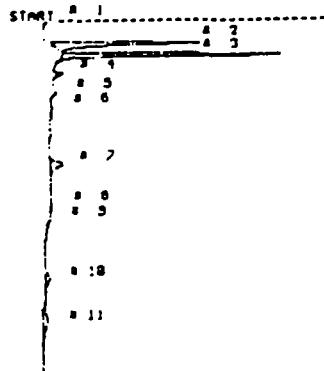
# PHOTOVAC



STOP 0 348.0  
SAMPLE LIBRARY 1 APR 11 1994 10152  
ANALYSIS 8 10 AIR BLANK  
INTERNAL TEMP 20  
GAIN 10 500 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 2 32.3 3.1 US  
UNKNOWN 3 61.2 273.0 MUS  
UNKNOWN 5 120.0 100.3 MUS

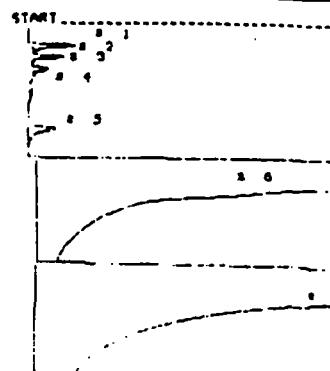
# PHOTOVAC



STOP 0 600.0  
SAMPLE LIBRARY 1 APR 11 1994 10149  
ANALYSIS 8 12 PCE, TOLUENE  
INTERNAL TEMP 20  
GAIN 10 500 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 52.4 0.8 US  
UNKNOWN 2 52.9 0.8 US  
UNKNOWN 4 63.2 120.5 MUS  
UNKNOWN 7 206.4 495.4 MUS  
UNKNOWN 10 412.0 280.4 MUS  
UNKNOWN 11 608.0 320.2 MUS

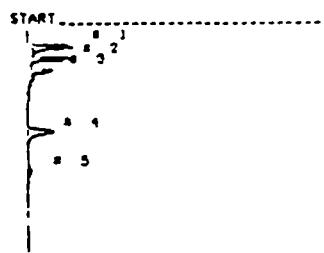
# PHOTOVAC



STOP 0 300.0  
SAMPLE LIBRARY 1 APR 11 1994 10150  
ANALYSIS 8 11 PCE, TOL, TCE  
INTERNAL TEMP 20  
GAIN 10 500 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 32.0 628.5 MUS  
UNKNOWN 2 52.1 491.7 MUS  
UNKNOWN 2 55.2 244.2 MUS  
UNKNOWN 5 122.2 789.1 MUS  
UNKNOWN 6 243.8 652.3 US  
UNKNOWN 7 422.5 618.2 US

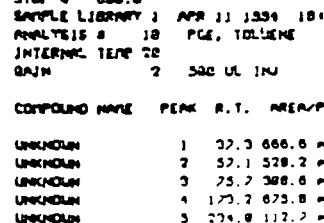
# PHOTOVAC



STOP 0 348.0  
SAMPLE LIBRARY 1 APR 11 1994 10152  
ANALYSIS 8 10 AIR BLANK  
INTERNAL TEMP 20  
GAIN 10 500 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 2 32.3 3.1 US  
UNKNOWN 3 61.2 273.0 MUS  
UNKNOWN 5 120.0 100.3 MUS

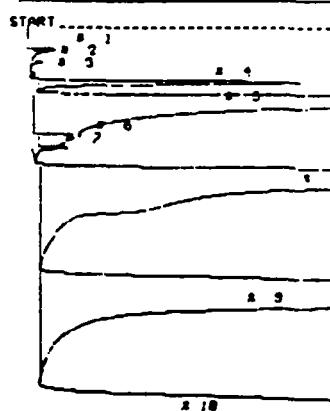
# PHOTOVAC



STOP 0 600.0  
SAMPLE LIBRARY 1 APR 11 1994 10149  
ANALYSIS 8 10 PCE, TOLUENE  
INTERNAL TEMP 20  
GAIN 10 500 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 52.3 666.0 MUS  
UNKNOWN 2 52.1 528.2 MUS  
UNKNOWN 3 75.2 388.6 MUS  
UNKNOWN 4 123.2 673.8 MUS  
UNKNOWN 5 224.8 112.2 MUS

# PHOTOVAC



STOP 0 300.0  
SAMPLE LIBRARY 1 APR 11 1994 10150  
ANALYSIS 8 12 PCE, TOL, TCE  
INTERNAL TEMP 20 C16-DCE  
GAIN 10 500 UL IN

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 1 36.9 135.2 MUS  
UNKNOWN 4 82.4 5.1 US  
UNKNOWN 5 115.4 131.4 US  
UNKNOWN 6 120.2 2.3 US  
UNKNOWN 7 131.2 649.2 MUS  
UNKNOWN 8 232.2 312.0 US  
UNKNOWN 9 416.2 464.2 US

# PHOTOVAC

START 1-----  
STOP 8-----  
SAMPLE LIBRARY : APR 11 1994 16:17  
ANALYSIS # 2 AIR BLANK  
INTERNAL TEMP 10  
BAIN 10 500 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 2 42.6 6.3 US  
UNKNOWN 3 65.7 421.4 MUS  
UNKNOWN 2 122.2 561.2 MUS  
UNKNOWN 2 152.6 151.8 MUS  
UNKNOWN 2 438.6 288.0 MUS

*mcb*

# PHOTOVAC

START-----  
STOP 6-----  
SAMPLE LIBRARY : APR 11 1994 16:17  
ANALYSIS # 3 CIGS TRANS-OCE  
INTERNAL TEMP 10  
BAIN 10 500 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

*mcb*

# PHOTOVAC

START-----  
STOP 8-----  
SAMPLE LIBRARY : APR 11 1994 16:17  
ANALYSIS # 3 CIGS TRANS-OCE  
INTERNAL TEMP 10  
BAIN 2 500 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN 1 58.9 177.1 US  
UNKNOWN 2 69.5 2.5 US  
UNKNOWN 3 112.6 257.0 US  
UNKNOWN 4 148.4 828.4 MUS  
UNKNOWN 5 176.7 444.2 MUS  
UNKNOWN 7 432.3 204.4 MUS

*mcb*

# PHOTOVAC

START 1-----  
STOP 8-----  
SAMPLE LIBRARY : APR 11 1994 16:18  
ANALYSIS # 2 AIR BLANK  
INTERNAL TEMP 10  
BAIN 10 500 uL INJ

8.9  
8.10

*mcb*

STOP 8-----  
SAMPLE LIBRARY : APR 11 1994 16:18  
ANALYSIS # 2 AIR BLANK  
INTERNAL TEMP 10  
BAIN 10 500 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM  
UNKNOWN 2 37.3 5.5 US  
UNKNOWN 3 63.1 492.2 MUS  
UNKNOWN 4 91.3 4.3 US  
UNKNOWN 6 123.6 379.0 MUS  
UNKNOWN 7 143.2 161.2 MUS  
UNKNOWN 8 243.2 1.3 US  
UNKNOWN 9 432.2 381.4 MUS

# PHOTOVAC

START-----  
STOP 8-----  
SAMPLE LIBRARY : APR 11 1994 17:07  
ANALYSIS # 4 CIGS TRANS-OCE  
INTERNAL TEMP 10  
BAIN 10 500 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

*mcb*

# PHOTOVAC

START-----  
STOP 8-----  
SAMPLE LIBRARY : APR 11 1994 17:07  
ANALYSIS # 4 CIGS TRANS-OCE  
INTERNAL TEMP 10  
BAIN 10 500 uL INJ

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN 2 37.3 8.2 US  
UNKNOWN 3 61.1 357.6 MUS  
UNKNOWN 4 93.2 259.0 MUS  
UNKNOWN 5 128.0 212.8 MUS  
UNKNOWN 3 423.4 141.0 MUS

*mcb*

May 1994

943-3627

TABLE D-1  
FIELD GC RESULTS  
BROCKWAY STANDARD  
HOMERVILLE, GEORGIA

	T-DCE (ppb)	C-DCE (ppb)	TCE (ppb)	TOLUENE (ppb)	PCE (ppb)	LAB?
DETECTION LIMIT	5	5	5	5	5	
LOCATION						
SURFACE SOILS/SEDIMENTS						
VSB-1	ND	ND	ND	ND	ND	X
VSB-2	ND	ND	ND	ND	ND	X
VSB-3	46	ND	5.5	ND	ND	
VSB-4	39	ND	ND	ND	ND	
VSB-5	50	ND	ND	ND	ND	
VSB-6	19	ND	ND	ND	ND	
VSS-1	36	ND	ND	9.6	5.6	
VSS-2	ND	ND	ND	33	ND	
VSS-3	64	ND	ND	ND	ND	
VSS-4	47	ND	ND	ND	ND	

NOTES: Results are for water samples unless otherwise indicated.

T-DCE = trans-1,2-dichloroethene

C-DCE = cis-1,2-dichloroethene

TCE = trichloroethene

PCE = tetrachloroethene

ND = not detected

BDL = detected but below detection limits

AB = duplicate samples

FN: D-1.WK1\943-3627\AJ

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-7  
ACL Sample No.: 82696  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: -----  
Date Analyzed: 04-27-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
500-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: Production Well  
ACL Sample No.: 82697  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: ----  
Date Analyzed: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Station No.: MW-10ACL Sample No.: 82698Matrix: WaterACL Project No.: 15880Date Sampled: 04-19-94Date Extracted: ----Date Analyzed: 04-22-94

Contact: Ms. Mary Bourcier  
Project No.: 943-3627,400/Homerville  
Date Received: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	14	10
75-00-3	Chloroethane	11	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	307	5
75-34-3	1,1-Dichloroethane	283	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	3J	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	72	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	12	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	4J	5
156-59-2	cis-1,2-Dichloroethene	15	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-9  
ACL Sample No.: 82699  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: -----  
Date Analyzed: 04-22-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	12	10
75-00-3	Chloroethane	17	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	393	5
75-34-3	1,1-Dichloroethane	337	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	3J	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	28	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	97	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	9	5
156-59-2	cis-1,2-Dichloroethene	12	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356

TELEPHONE (404) 409-1444

**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-11  
ACL Sample No.: 82700  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: ----  
Date Analyzed: 04-23-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	50
74-83-9	Bromomethane	BDL	50
50-01-4	Vinyl Chloride	BDL	50
75-00-3	Chloroethane	BDL	50
75-09-2	Methylene Chloride	BDL	25
67-64-1	Acetone	BDL	500
75-15-0	Carbon Disulfide	BDL	25
75-35-4	1,1-Dichloroethene	3250	25
75-34-3	1,1-Dichloroethane	199	25
156-60-5	trans-1,2-Dichloroethene	BDL	25
67-66-3	Chloroform	BDL	25
107-06-2	1,2-Dichloroethane	19J	25
78-93-3	2-Butanone	BDL	500
71-55-6	1,1,1-Trichloroethane	2670	25
56-23-5	Carbon Tetrachloride	BDL	25
108-05-4	Vinyl Acetate	BDL	250
75-27-4	Bromodichloromethane	BDL	25
78-87-5	1,2-Dichloropropane	BDL	25
10061-01-5	cis-1,3-Dichloropropene	BDL	25
79-01-6	Trichloroethene	639	25
124-48-1	Dibromochloromethane	BDL	25
79-00-5	1,1,2-Trichloroethane	15J	25
71-43-2	Benzene	BDL	25
10061-02-6	trans-1,3-Dichloropropene	BDL	25
75-25-2	Bromoform	BDL	25
108-10-1	4-Methyl-2-Pentanone	BDL	250
591-78-6	2-Hexanone	BDL	250
127-18-4	Tetrachloroethene	8J	25
108-34-5	1,1,2,2-Tetrachloroethane	BDL	25
108-88-3	Toluene	107	25
108-90-7	Chlorobenzene	BDL	25
100-41-4	Ethylbenzene	BDL	25
100-42-5	Styrene	BDL	25
1330-20-7	Xylenes (total)	BDL	25
156-59-2	cis-1,2-Dichloroethene	118	25

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P.O. BOX 88610 • ATLANTA, GEORGIA 30356

TELEPHONE (404) 409-1444

**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Station No.: MW-3A  
ACL Sample No.: 82701  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: ----  
Date Analyzed: 04-23-94

Contact: Ms. Mary Bourcier  
Project No.: 943-3627,400/Homerville  
Date Received: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
74-87-3	Chloromethane	BDL	125
74-83-9	Bromomethane	BDL	125
75-01-4	Vinyl Chloride	550	125
75-00-3	Chloroethane	BDL	125
75-09-2	Methylene Chloride	BDL	63
67-64-1	Acetone	BDL	1250
75-15-0	Carbon Disulfide	BDL	63
75-35-4	1,1-Dichloroethene	6210	63
75-34-3	1,1-Dichloroethane	1060	63
156-60-5	trans-1,2-Dichloroethene	BDL	63
67-66-3	Chloroform	BDL	63
107-06-2	1,2-Dichloroethane	38J	63
78-93-3	2-Butanone	496J	1250
71-55-6	1,1,1-Trichloroethane	135	63
56-23-5	Carbon Tetrachloride	BDL	63
108-05-4	Vinyl Acetate	BDL	625
75-27-4	Bromodichloromethane	BDL	63
78-87-5	1,2-Dichloropropane	BDL	63
10061-01-5	cis-1,3-Dichloropropene	BDL	63
79-01-6	Trichloroethene	253	63
124-48-1	Dibromochloromethane	BDL	63
79-00-5	1,1,2-Trichloroethane	BDL	63
71-43-2	Benzene	BDL	63
10061-02-6	trans-1,3-Dichloropropene	BDL	63
75-25-2	Bromoform	BDL	63
108-10-1	4-Methyl-2-Pentanone	BDL	625
591-78-6	2-Hexanone	BDL	625
127-18-4	Tetrachloroethene	BDL	63
79-34-5	1,1,2,2-Tetrachloroethane	BDL	63
108-88-3	Toluene	196	63
108-90-7	Chlorobenzene	BDL	63
100-41-4	Ethylbenzene	58J	63
100-42-5	Styrene	BDL	63
1330-20-7	Xylenes (total)	2360	63
156-59-2	cis-1,2-Dichloroethene	1530	63

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-8  
ACL Sample No.: 82702  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-20-94  
Date Extracted: ----  
Date Analyzed: 04-23-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	25
74-83-9	Bromomethane	BDL	25
75-01-4	Vinyl Chloride	35	25
500-3	Chloroethane	BDL	25
75-09-2	Methylene Chloride	BDL	13
67-64-1	Acetone	BDL	250
75-15-0	Carbon Disulfide	BDL	13
75-35-4	1,1-Dichloroethene	783	13
75-34-3	1,1-Dichloroethane	118	13
156-60-5	trans-1,2-Dichloroethene	BDL	13
67-66-3	Chloroform	BDL	13
107-06-2	1,2-Dichloroethane	BDL	13
78-93-3	2-Butanone	BDL	250
71-55-6	1,1,1-Trichloroethane	BDL	13
56-23-5	Carbon Tetrachloride	BDL	13
108-05-4	Vinyl Acetate	BDL	125
75-27-4	Bromodichloromethane	BDL	13
78-87-5	1,2-Dichloropropane	BDL	13
10061-01-5	cis-1,3-Dichloropropene	BDL	13
79-01-6	Trichloroethene	153	13
124-48-1	Dibromochloromethane	BDL	13
79-00-5	1,1,2-Trichloroethane	BDL	13
71-43-2	Benzene	BDL	13
10061-02-6	trans-1,3-Dichloropropene	BDL	13
75-25-2	Bromoform	BDL	13
108-10-1	4-Methyl-2-Pentanone	BDL	125
591-78-6	2-Hexanone	BDL	125
127-18-4	Tetrachloroethene	BDL	13
9-34-5	1,1,2,2-Tetrachloroethane	BDL	13
108-88-3	Toluene	BDL	13
108-90-7	Chlorobenzene	BDL	13
100-41-4	Ethylbenzene	BDL	13
100-42-5	Styrene	BDL	13
1330-20-7	Xylenes (total)	BDL	13
156-59-2	cis-1,2-Dichloroethene	60	13

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: VSS-4  
ACL Sample No.: 82706  
Matrix: Soil  
ACL Project No.: 15880  
Date Sampled: 04-20-94  
Date Extracted: ----  
Date Analyzed: 04-25-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/kg}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Station No.: VSS-1ACL Sample No.: 82707Matrix: SoilACL Project No.: 15880Date Sampled: 04-20-94Date Extracted: ----Date Analyzed: 04-25-94

Contact: Ms. Mary Bourcier  
Project No.: 943-3627, 400/Homerville  
Date Received: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g}/\text{kg}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
500-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: DD-1

ACL Sample No.: 82693

Matrix: Water

ACL Project No.: 15880

Date Sampled: 04-19-94

Date Extracted: 04-26-94

Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
108-95-2	Phenol	BDL	10
95-57-8	2-Chlorophenol	BDL	10
95-48-7	2-Methylphenol	BDL	10
106-44-5	4-Methylphenol	BDL	10
88-75-5	2-Nitrophenol	BDL	10
105-67-9	2,4-Dimethylphenol	BDL	10
65-85-0	Benzoic acid	BDL	50
120-83-2	2,4-Dichlorophenol	BDL	10
59-50-7	4-Chloro-3-methylphenol	BDL	20
88-06-2	2,4,5-Trichlorophenol	BDL	10
95-95-4	2,4,5-Trichlorophenol	BDL	10
51-28-5	2,4-Dinitrophenol	BDL	50
100-02-7	4-Nitrophenol	BDL	50
534-52-1	4,6-Dinitro-2-methylphenol	BDL	50
87-86-5	Pentachlorophenol	BDL	50

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: DD-1  
ACL Sample No.: 82693  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
100-51-6	Benzyl alcohol	BDL	20
95-50-1	1,2-Dichlorobenzene	BDL	10
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	10
621-64-7	N-Nitroso-di-n-propylamine	BDL	10
67-72-1	Hexachloroethane	BDL	10
98-95-3	Nitrobenzene	BDL	10
78-59-1	Isophorone	BDL	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	10
120-82-1	1,2,4-Trichlorobenzene	BDL	10
91-20-3	Naphthalene	BDL	10
106-47-8	4-Chloroaniline	BDL	20
87-68-3	Hexachlorobutadiene	BDL	10
91-57-6	2-Methylnaphthalene	BDL	10
77-47-4	Hexachlorocyclopentadiene	BDL	10
91-58-7	2-Choronaphthalene	BDL	10
88-74-4	2-Nitroaniline	BDL	50
131-11-3	Dimethyl phthalate	BDL	10
208-96-8	Acenaphthylene	BDL	10
606-20-2	2,6-Dinitrotoluene	BDL	10
99-09-2	3-Nitroaniline	BDL	50
83-32-9	Acenaphthene	BDL	10
132-64-9	Dibenzofuran	BDL	10
121-14-2	2,4-Dinitrotoluene	BDL	10
84-66-2	Diethyl phthalate	BDL	10
7005-72-3	4-Chlorophenyl phenyl ether	BDL	10
86-73-7	Fluorene	BDL	10
100-01-6	4-Nitroaniline	BDL	50
86-30-6	N-Nitrosodiphenylamine	BDL	10
101-55-3	4-Bromophenyl phenyl ether	BDL	10
118-74-1	Hexachlorobenzene	BDL	10
85-01-8	Phenanthrene	BDL	10

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: DD-1  
ACL Sample No.: 82693  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
120-12-7	Anthracene	BDL	10
84-74-2	Di-n-butyl phthalate	BDL	10
206-44-0	Fluoranthene	BDL	10
129-00-0	Pyrene	BDL	10
85-68-7	Butyl benzyl phthalate	BDL	10
91-94-1	3,3'-Dichlorobenzidine	BDL	20
56-55-3	Benzo(a)anthracene	BDL	10
218-01-9	Chrysene	BDL	10
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	10
117-84-0	Di-n-octyl phthalate	BDL	10
205-99-2	Benzo(b)fluoranthene	BDL	10
207-08-9	Benzo(k)fluoranthene	BDL	10
50-32-8	Benzo(a)pyrene	BDL	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	10
53-70-3	Dibenz(a,h)anthracene	BDL	10
191-24-2	Benzo(g,h,i)perylene	BDL	10

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-12  
ACL Sample No.: 82694  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
108-95-2	Phenol	BDL	10
95-57-8	2-Chlorophenol	BDL	10
95-48-7	2-Methylphenol	BDL	10
106-44-5	4-Methylphenol	BDL	10
88-75-5	2-Nitrophenol	BDL	10
105-67-9	2,4-Dimethylphenol	BDL	10
65-85-0	Benzoic acid	BDL	50
120-83-2	2,4-Dichlorophenol	BDL	10
59-50-7	4-Chloro-3-methylphenol	BDL	20
88-06-2	2,4,6-Trichlorophenol	BDL	10
95-95-4	2,4,5-Trichlorophenol	BDL	10
51-28-5	2,4-Dinitrophenol	BDL	50
100-02-7	4-Nitrophenol	BDL	50
534-52-1	4,6-Dinitro-2-methylphenol	BDL	50
87-86-5	Pentachlorophenol	BDL	50

DL = Below Detection Limit

LT = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: MW-12

ACL Sample No.: 82694

Matrix: Water

ACL Project No.: 15880

Date Sampled: 04-19-94

Date Extracted: 04-26-94

Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
100-51-6	Benzyl alcohol	BDL	20
95-50-1	1,2-Dichlorobenzene	BDL	10
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	10
621-64-7	N-Nitroso-di-n-propylamine	BDL	10
67-72-1	Hexachloroethane	BDL	10
98-95-3	Nitrobenzene	BDL	10
78-59-1	Isophorone	BDL	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	10
120-82-1	1,2,4-Trichlorobenzene	BDL	10
91-20-3	Naphthalene	BDL	10
106-47-8	4-Chloroaniline	BDL	20
87-68-3	Hexachlorobutadiene	BDL	10
91-57-6	2-Methylnaphthalene	BDL	10
77-47-4	Hexachlorocyclopentadiene	BDL	10
91-58-7	2-Chloronaphthalene	BDL	10
88-74-4	2-Nitroaniline	BDL	50
131-11-3	Dimethyl phthalate	BDL	10
208-96-8	Acenaphthylene	BDL	10
606-20-2	2,6-Dinitrotoluene	BDL	10
99-09-2	3-Nitroaniline	BDL	50
83-32-9	Acenaphthene	BDL	10
132-64-9	Dibenzofuran	BDL	10
121-14-2	2,4-Dinitrotoluene	BDL	10
84-68-2	Diethyl phthalate	BDL	10
7005-72-3	4-Chlorophenyl phenyl ether	BDL	10
86-73-7	Fluorene	BDL	10
100-01-6	4-Nitroaniline	BDL	50
86-30-6	N-Nitrosodiphenylamine	BDL	10
101-55-3	4-Bromophenyl phenyl ether	BDL	10
118-74-1	Hexachlorobenzene	BDL	10
85-01-8	Phenanthrene	BDL	10

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: MW-12  
ACL Sample No.: 82694  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
120-12-7	Anthracene	BDL	10
84-74-2	Di-n-butyl phthalate	BDL	10
206-44-0	Fluoranthene	BDL	10
129-00-0	Pyrene	BDL	10
85-68-7	Butyl benzyl phthalate	BDL	10
91-94-1	3,3'-Dichlorobenzidine	BDL	20
56-55-3	Benzo(a)anthracene	BDL	10
218-01-9	Chrysene	BDL	10
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	10
117-84-0	Di-n-octyl phthalate	BDL	10
205-99-2	Benzo(b)fluoranthene	BDL	10
207-08-9	Benzo(k)fluoranthene	BDL	10
50-32-8	Benzo(a)pyrene	BDL	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	10
53-70-3	Dibenz(a,h)anthracene	BDL	10
191-24-2	Benzo(g,h,i)perylene	BDL	10

BDL = Below Detection Limit

LT = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No: MW-7

ACL Sample No.: 82696

Matrix: Water

ACL Project No.: 15880

Date Sampled: 04-19-94

Date Extracted: 04-26-94

Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
108-95-2	Phenol	BDL	10
95-57-8	2-Chlorophenol	BDL	10
95-48-7	2-Methylphenol	BDL	10
106-44-5	4-Methylphenol	BDL	10
88-75-5	2-Nitrophenol	BDL	10
105-67-9	2,4-Dimethylphenol	BDL	10
65-85-0	Benzoic acid	BDL	50
120-83-2	2,4-Dichlorophenol	BDL	10
59-50-7	4-Chloro-3-methylphenol	BDL	20
88-06-2	2,4,6-Trichlorophenol	BDL	10
95-95-4	2,4,5-Trichlorophenol	BDL	10
51-28-5	2,4-Dinitrophenol	BDL	50
100-02-7	4-Nitrophenol	BDL	50
534-52-1	4,6-Dinitro-2-methylphenol	BDL	50
87-86-5	Pentachlorophenol	BDL	50

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value



## ADVANCED CHEMISTRY LABS, INC.

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444BASE/NEUTRALS - SW-846, METHOD 8270

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: MW-7

ACL Sample No.: 82696

Matrix: Water

ACL Project No.: 15880

Date Sampled: 04-19-94

Date Extracted: 04-26-94

Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
100-51-6	Benzyl alcohol	BDL	20
95-50-1	1,2-Dichlorobenzene	BDL	10
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	10
621-64-7	N-Nitroso-di-n-propylamine	BDL	10
67-72-1	Hexachloroethane	BDL	10
98-95-3	Nitrobenzene	BDL	10
78-59-1	Isophorone	BDL	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	10
120-82-1	1,2,4-Trichlorobenzene	BDL	10
91-20-3	Naphthalene	BDL	10
106-47-8	4-Chloroaniline	BDL	20
87-68-3	Hexachlorobutadiene	BDL	10
91-57-6	2-Methylnaphthalene	BDL	10
77-47-4	Hexachlorocyclopentadiene	BDL	10
91-58-7	2-Choronaphthalene	BDL	10
88-74-4	2-Nitroaniline	BDL	50
131-11-3	Dimethyl phthalate	BDL	10
208-96-8	Acenaphthylene	BDL	10
606-20-2	2,6-Dinitrotoluene	BDL	10
99-09-2	3-Nitroaniline	BDL	50
83-32-9	Acenaphthene	BDL	10
132-64-9	Dibenzofuran	BDL	10
121-14-2	2,4-Dinitrotoluene	BDL	10
84-66-2	Diethyl phthalate	BDL	10
7005-72-3	4-Chlorophenyl phenyl ether	BDL	10
86-73-7	Fluorene	BDL	10
100-01-6	4-Nitroaniline	BDL	50
86-30-6	N-Nitrosodiphenylamine	BDL	10
101-55-3	4-Bromophenyl phenyl ether	BDL	10
118-74-1	Hexachlorobenzene	BDL	10
85-01-8	Phenanthrene	BDL	10

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: MW-7  
ACL Sample No.: 82696  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
120-12-7	Anthracene	BDL	10
84-74-2	Di-n-butyl phthalate	BDL	10
206-44-0	Fluoranthene	BDL	10
129-00-0	Pyrene	BDL	10
85-68-7	Butyl benzyl phthalate	BDL	10
91-94-1	3,3'-Dichlorobenzidine	BDL	20
56-55-3	Benzo(a)anthracene	BDL	10
218-01-9	Chrysene	BDL	10
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	10
117-84-0	Di-n-octyl phthalate	BDL	10
205-99-2	Benzo(b)fluoranthene	BDL	10
207-08-9	Benzo(k)fluoranthene	BDL	10
50-32-8	Benzo(a)pyrene	BDL	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	10
53-70-3	Dibenz(a,h)anthracene	BDL	10
191-24-2	Benzo(g,h,i)perylene	BDL	10

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-10  
ACL Sample No.: 82698  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
108-95-2	Phenol	BDL	10
95-57-8	2-Chlorophenol	BDL	10
95-48-7	2-Methylphenol	BDL	10
106-44-5	4-Methylphenol	BDL	10
88-75-5	2-Nitrophenol	BDL	10
105-67-9	2,4-Dimethylphenol	BDL	10
65-85-0	Benzoic acid	BDL	50
120-83-2	2,4-Dichlorophenol	BDL	10
59-50-7	4-Chloro-3-methylphenol	BDL	20
88-06-2	2,4,6-Trichlorophenol	BDL	10
95-95-4	2,4,5-Trichlorophenol	BDL	10
51-28-5	2,4-Dinitrophenol	BDL	50
100-02-7	4-Nitrophenol	BDL	50
534-52-1	4,6-Dinitro-2-methylphenol	BDL	50
87-86-5	Pentachlorophenol	BDL	50

BDL = Below Detection Limit

LT = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: MW-10  
ACL Sample No.: 82698  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
100-51-6	Benzyl alcohol	BDL	20
95-50-1	1,2-Dichlorobenzene	BDL	10
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	10
621-64-7	N-Nitroso-di-n-propylamine	BDL	10
67-72-1	Hexachloroethane	BDL	10
98-95-3	Nitrobenzene	BDL	10
78-59-1	Isophorone	BDL	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	10
120-82-1	1,2,4-Trichlorobenzene	BDL	10
91-20-3	Naphthalene	BDL	10
106-47-8	4-Chloroaniline	BDL	20
87-68-3	Hexachlorobutadiene	BDL	10
91-57-6	2-Methylnaphthalene	BDL	10
77-47-4	Hexachlorocyclopentadiene	BDL	10
91-58-7	2-Chloronaphthalene	BDL	10
88-74-4	2-Nitroaniline	BDL	50
131-11-3	Dimethyl phthalate	BDL	10
208-96-8	Acenaphthylene	BDL	10
606-20-2	2,6-Dinitrotoluene	BDL	10
99-09-2	3-Nitroaniline	BDL	50
83-32-9	Acenaphthene	BDL	10
132-64-9	Dibenzofuran	BDL	10
121-14-2	2,4-Dinitrotoluene	BDL	10
84-66-2	Diethyl phthalate	BDL	10
7005-72-3	4-Chlorophenyl phenyl ether	BDL	10
86-73-7	Fluorene	BDL	10
100-01-6	4-Nitroaniline	BDL	50
86-30-6	N-Nitrosodiphenylamine	BDL	10
101-55-3	4-Bromophenyl phenyl ether	BDL	10
118-74-1	Hexachlorobenzene	BDL	10
85-01-8	Phenanthrene	BDL	10

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Station No.: MW-10ACL Sample No.: 82698Matrix: WaterACL Project No.: 15880Date Sampled: 04-19-94Date Extracted: 04-26-94Date Analyzed: 05-01-94

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
120-12-7	Anthracene	BDL	10
84-74-2	Di-n-butyl phthalate	BDL	10
206-44-0	Fluoranthene	BDL	10
129-00-0	Pyrene	BDL	10
85-68-7	Butyl benzyl phthalate	BDL	10
91-94-1	3,3'-Dichlorobenzidine	BDL	20
56-55-3	Benz(a)anthracene	BDL	10
218-01-9	Chrysene	BDL	10
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	10
117-84-0	Di-n-octyl phthalate	BDL	10
205-99-2	Benzo(b)fluoranthene	BDL	10
207-08-9	Benzo(k)fluoranthene	BDL	10
50-32-8	Benzo(a)pyrene	BDL	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	10
53-70-3	Dibenz(a,h)anthracene	BDL	10
191-24-2	Benzo(g,h,i)perylene	BDL	10

BDL = Below Detection Limit

LT = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-11  
ACL Sample No.: 82700  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
108-95-2	Phenol	BDL	10
95-57-8	2-Chlorophenol	BDL	10
95-48-7	2-Methylphenol	BDL	10
106-44-5	4-Methylphenol	BDL	10
88-75-5	2-Nitrophenol	BDL	10
105-67-9	2,4-Dimethylphenol	BDL	10
65-85-0	Benzoic acid	BDL	50
120-83-2	2,4-Dichlorophenol	BDL	10
59-50-7	4-Chloro-3-methylphenol	BDL	20
88-06-2	2,4,5-Trichlorophenol	BDL	10
95-95-4	2,4,5-Trichlorophenol	BDL	10
51-28-5	2,4-Dinitrophenol	BDL	50
100-02-7	4-Nitrophenol	BDL	50
534-52-1	4,6-Dinitro-2-methylphenol	BDL	50
87-86-5	Pentachlorophenol	BDL	50

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30366  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: MW-11

ACL Sample No.: 82700

Matrix: Water

ACL Project No.: 15880

Date Sampled: 04-19-94

Date Extracted: 04-26-94

Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
100-51-6	Benzyl alcohol	BDL	20
95-50-1	1,2-Dichlorobenzene	BDL	10
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	10
621-64-7	N-Nitroso-di-n-propylamine	BDL	10
67-72-1	Hexachloroethane	BDL	10
98-95-3	Nitrobenzene	BDL	10
78-59-1	Isophorone	BDL	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	10
120-82-1	1,2,4-Trichlorobenzene	BDL	10
91-20-3	Naphthalene	BDL	10
106-47-8	4-Chloroaniline	BDL	20
87-68-3	Hexachlorobutadiene	BDL	10
91-57-6	2-Methylnaphthalene	BDL	10
77-47-4	Hexachlorocyclopentadiene	BDL	10
91-58-7	2-Chloronaphthalene	BDL	10
88-74-4	2-Nitroaniline	BDL	50
131-11-3	Dimethyl phthalate	BDL	10
208-96-8	Acenaphthylene	BDL	10
606-20-2	2,6-Dinitrotoluene	BDL	10
99-09-2	3-Nitroaniline	BDL	50
83-32-9	Acenaphthene	BDL	10
132-64-9	Dibenzofuran	BDL	10
121-14-2	2,4-Dinitrotoluene	BDL	10
84-66-2	Diethyl phthalate	BDL	10
7005-72-3	4-Chlorophenyl phenyl ether	BDL	10
96-73-7	Fluorene	BDL	10
100-01-6	4-Nitroaniline	BDL	50
86-30-6	N-Nitrosodiphenylamine	BDL	10
101-55-3	4-Bromophenyl phenyl ether	BDL	10
118-74-1	Hexachlorobenzene	BDL	10
85-01-8	Phenanthrene	BDL	10

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: MW-11

ACL Sample No.: 82700

Matrix: Water

ACL Project No.: 15880

Date Sampled: 04-19-94

Date Extracted: 04-26-94

Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
120-12-7	Anthracene	BDL	10
84-74-2	Di-n-butyl phthalate	BDL	10
206-44-0	Fluoranthene	BDL	10
129-00-0	Pyrene	BDL	10
85-68-7	Butyl benzyl phthalate	BDL	10
91-94-1	3,3'-Dichlorobenzidine	BDL	20
56-55-3	Benzo(a)anthracene	BDL	10
218-01-9	Chrysene	BDL	10
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	10
117-84-0	Di-n-octyl phthalate	BDL	10
205-99-2	Benzo(b)fluoranthene	BDL	10
207-08-9	Benzo(k)fluoranthene	BDL	10
50-32-8	Benzo(a)pyrene	BDL	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	10
53-70-3	Dibenz(a,h)anthracene	BDL	10
191-24-2	Benzo(g,h,i)perylene	BDL	10

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-8  
ACL Sample No.: 82702  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-20-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
108-95-2	Phenol	BDL	10
95-57-8	2-Chlorophenol	BDL	10
95-48-7	2-Methylphenol	BDL	10
106-44-5	4-Methylphenol	BDL	10
88-75-5	2-Nitrophenol	BDL	10
105-67-9	2,4-Dimethylphenol	BDL	10
65-85-0	Benzoic acid	BDL	50
120-83-2	2,4-Dichlorophenol	BDL	10
59-50-7	4-Chloro-3-methylphenol	BDL	20
88-06-2	2,4,6-Trichlorophenol	BDL	10
95-95-4	2,4,5-Trichlorophenol	BDL	10
51-28-5	2,4-Dinitrophenol	BDL	50
100-02-7	4-Nitrophenol	BDL	50
534-52-1	4,6-Dinitro-2-methylphenol	BDL	50
87-86-5	Pentachlorophenol	BDL	50

BDL = Below Detection Limit

LT = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-8  
ACL Sample No.: 82702  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-20-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
100-51-6	Benzyl alcohol	BDL	20
95-50-1	1,2-Dichlorobenzene	BDL	10
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	10
621-64-7	N-Nitroso-di-n-propylamine	BDL	10
67-72-1	Hexachloroethane	BDL	10
98-95-3	Nitrobenzene	BDL	10
78-59-1	Isophorone	BDL	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	10
120-82-1	1,2,4-Trichlorobenzene	BDL	10
91-20-3	Naphthalene	BDL	10
106-47-8	4-Chloroaniline	BDL	20
87-68-3	Hexachlorobutadiene	BDL	10
91-57-6	2-Methylnaphthalene	BDL	10
77-47-4	Hexachlorocyclopentadiene	BDL	10
91-58-7	2-Choronaphthalene	BDL	10
88-74-4	2-Nitroaniline	BDL	50
131-11-3	Dimethyl phthalate	BDL	10
208-96-8	Acenaphthylene	BDL	10
606-20-2	2,6-Dinitrotoluene	BDL	10
99-09-2	3-Nitroaniline	BDL	50
83-32-9	Acenaphthene	BDL	10
132-64-9	Dibenzofuran	BDL	10
121-14-2	2,4-Dinitrotoluene	BDL	10
84-66-2	Diethyl phthalate	BDL	10
7005-72-3	4-Chlorophenyl phenyl ether	BDL	10
86-73-7	Fluorene	BDL	10
100-01-6	4-Nitroaniline	BDL	50
86-30-6	N-Nitrosodiphenylamine	BDL	10
101-55-3	4-Bromophenyl phenyl ether	BDL	10
118-74-1	Hexachlorobenzene	BDL	10
85-01-8	Phenanthrene	BDL	10



# ADVANCED CHEMISTRY LABS, INC.

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

## BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: MW-8  
ACL Sample No.: 82702  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-20-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
120-12-7	Anthracene	BDL	10
84-74-2	Di-n-butyl phthalate	BDL	10
206-44-0	Fluoranthene	BDL	10
129-00-0	Pyrene	BDL	10
85-68-7	Butyl benzyl phthalate	BDL	10
91-94-1	3,3-Dichlorobenzidine	BDL	20
56-55-3	Benzo(a)anthracene	BDL	10
218-01-9	Chrysene	BDL	10
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	10
117-84-0	Di-n-octyl phthalate	BDL	10
205-99-2	Benzo(b)fluoranthene	BDL	10
207-08-9	Benzo(k)fluoranthene	BDL	10
50-32-8	Benzo(a)pyrene	BDL	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	10
53-70-3	Dibenz(a,h)anthracene	BDL	10
191-24-2	Benzo(g,h,i)perylene	BDL	10

BDL = Below Detection Limit

\* Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No: Lagoon  
ACL Sample No.: 82703  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
108-95-2	Phenol	BDL	10
95-57-8	2-Chlorophenol	BDL	10
95-48-7	2-Methylphenol	BDL	10
106-44-5	4-Methylphenol	BDL	10
88-75-5	2-Nitrophenol	BDL	10
105-67-9	2,4-Dimethylphenol	BDL	10
65-85-0	Benzoic acid	BDL	50
120-83-2	2,4-Dichlorophenol	BDL	10
59-50-7	4-Chloro-3-methylphenol	BDL	20
88-06-2	2,4,5-Trichlorophenol	BDL	10
95-95-4	2,4,5-Trichlorophenol	BDL	10
51-28-5	2,4-Dinitrophenol	BDL	50
100-02-7	4-Nitrophenol	BDL	50
534-52-1	4,6-Dinitro-2-methylphenol	BDL	50
87-86-5	Pentachlorophenol	BDL	50

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: Lagoon  
ACL Sample No.: 82703  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
100-51-6	Benzyl alcohol	BDL	20
95-50-1	1,2-Dichlorobenzene	BDL	10
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	10
621-64-7	N-Nitroso-di-n-propylamine	BDL	10
67-72-1	Hexachloroethane	BDL	10
98-95-3	Nitrobenzene	BDL	10
78-59-1	Isophorone	BDL	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	10
120-82-1	1,2,4-Trichlorobenzene	BDL	10
91-20-3	Naphthalene	BDL	10
106-47-8	4-Chloroaniline	BDL	20
87-68-3	Hexachlorobutadiene	BDL	10
91-57-6	2-Methylnaphthalene	BDL	10
77-47-4	Hexachlorocyclopentadiene	BDL	10
91-58-7	2-Choronaphthalene	BDL	10
88-74-4	2-Nitroaniline	BDL	50
131-11-3	Dimethyl phthalate	BDL	10
208-96-8	Acenaphthylene	BDL	10
606-20-2	2,6-Dinitrotoluene	BDL	10
99-09-2	3-Nitroaniline	BDL	50
83-32-9	Acenaphthene	BDL	10
132-64-9	Dibenzofuran	BDL	10
121-14-2	2,4-Dinitrotoluene	BDL	10
84-66-2	Diethyl phthalate	BDL	10
7005-72-3	4-Chlorophenyl phenyl ether	BDL	10
86-73-7	Fluorene	BDL	10
100-01-6	4-Nitroaniline	BDL	50
86-30-6	N-Nitrosodiphenylamine	BDL	10
101-55-3	4-Bromophenyl phenyl ether	BDL	10
118-74-1	Hexachlorobenzene	BDL	10
85-01-8	Phenanthrene	BDL	10

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

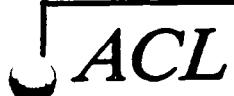
Date Received: 04-21-94

Station No.: Lagoon  
ACL Sample No.: 82703  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: 04-19-94  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
120-12-7	Anthracene	BDL	10
84-74-2	Di-n-butyl phthalate	BDL	10
206-44-0	Fluoranthene	BDL	10
129-00-0	Pyrene	BDL	10
85-68-7	Butyl benzyl phthalate	BDL	10
91-94-1	3,3'-Dichlorobenzidine	BDL	20
56-55-3	Benzo(a)anthracene	BDL	10
218-01-9	Chrysene	BDL	10
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	10
117-84-0	Di-n-octyl phthalate	BDL	10
205-99-2	Benzo(b)fluoranthene	BDL	10
207-08-9	Benzo(k)fluoranthene	BDL	10
50-32-8	Benzo(a)pyrene	BDL	10
193-39-5	Indeno(1,2,3- <i>cd</i> )pyrene	BDL	10
53-70-3	Dibenz(a,h)anthracene	BDL	10
191-24-2	Benzo(g,h,i)perylene	BDL	10

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value



**ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: VSS-4  
ACL Sample No.: 82706  
Matrix: Soil  
ACL Project No.: 15880  
Date Sampled: 04-20-94  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
108-95-2	Phenol	BDL	0.33
95-57-8	2-Chlorophenol	BDL	0.33
95-48-7	2-Methylphenol	BDL	0.33
106-44-5	4-Methylphenol	BDL	0.33
88-75-5	2-Nitrophenol	BDL	0.33
105-67-9	2,4-Dimethylphenol	BDL	0.33
65-85-0	Benzoic acid	BDL	1.65
120-83-2	2,4-Dichlorophenol	BDL	0.33
59-50-7	4-Chloro-3-methylphenol	BDL	0.66
88-06-2	2,4,6-Trichlorophenol	BDL	0.33
95-95-4	2,4,5-Trichlorophenol	BDL	0.33
51-28-5	2,4-Dinitrophenol	BDL	1.65
100-02-7	4-Nitrophenol	BDL	1.65
534-52-1	4,6-Dinitro-2-methylphenol	BDL	1.65
87-86-5	Pentachlorophenol	BDL	1.65

BDL = Below Detection Limit

= Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: VSS-4  
ACL Sample No.: 82706  
Matrix: Soil  
ACL Project No.: 15880  
Date Sampled: 04-20-94  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	0.33
541-73-1	1,3-Dichlorobenzene	BDL	0.33
106-46-7	1,4-Dichlorobenzene	BDL	0.33
100-51-6	Benzyl alcohol	BDL	0.66
95-50-1	1,2-Dichlorobenzene	BDL	0.33
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	0.33
621-64-7	N-Nitroso-di-n-propylamine	BDL	0.33
67-72-1	Hexachloroethane	BDL	0.33
98-95-3	Nitrobenzene	BDL	0.33
78-59-1	Isophorone	BDL	0.33
111-91-1	bis(2-Chloroethoxy)methane	BDL	0.33
120-82-1	1,2,4-Trichlorobenzene	BDL	0.33
91-20-3	Naphthalene	BDL	0.33
106-47-8	4-Chloroaniline	BDL	0.66
87-68-3	Hexachlorobutadiene	BDL	0.33
91-57-6	2-Methylnaphthalene	BDL	0.33
77-47-4	Hexachlorocyclopentadiene	BDL	0.33
91-58-7	2-Chloronaphthalene	BDL	0.33
88-74-4	2-Nitroaniline	BDL	1.65
131-11-3	Dimethyl phthalate	BDL	0.33
208-96-8	Acenaphthylene	BDL	0.33
606-20-2	2,6-Dinitrotoluene	BDL	0.33
99-09-2	3-Nitroaniline	BDL	1.65
83-32-9	Acenaphthene	BDL	0.33
132-64-9	Dibenzofuran	BDL	0.33
121-14-2	2,4-Dinitrotoluene	BDL	0.33
84-66-2	Diethyl phthalate	BDL	0.33
7005-72-3	4-Chlorophenyl phenyl ether	BDL	0.33
86-73-7	Fluorene	BDL	0.33
100-01-6	4-Nitroaniline	BDL	1.65
86-30-6	N-Nitrosodiphenylamine	BDL	0.33
101-55-3	4-Bromophenyl phenyl ether	BDL	0.33
118-74-1	Hexachlorobenzene	BDL	0.33
85-01-8	Phenanthrene	BDL	0.33

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: VSS-4  
ACL Sample No.: 82706  
Matrix: Soil  
ACL Project No.: 15880  
Date Sampled: 04-20-94  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
120-12-7	Anthracene	BDL	0.33
84-74-2	Di-n-butyl phthalate	BDL	0.33
206-44-0	Fluoranthene	0.07J	0.33
129-00-0	Pyrene	0.11J	0.33
85-68-7	Butyl benzyl phthalate	BDL	0.33
91-94-1	3,3'-Dichlorobenzidine	BDL	0.66
56-55-3	Benzo(a)anthracene	BDL	0.33
218-01-9	Chrysene	0.08J	0.33
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	0.33
117-84-0	Di-n-octyl phthalate	BDL	0.33
205-99-2	Benzo(b)fluoranthene	0.09J	0.33
207-08-9	Benzo(k)fluoranthene	0.08J	0.33
50-32-8	Benzo(a)pyrene	BDL	0.33
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	0.33
53-70-3	Dibenz(a,h)anthracene	BDL	0.33
191-24-2	Benzo(g,h,i)perylene	BDL	0.33

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**DR. STEVE N. TSOUKALAS  
DIRECTORP.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 455-1266Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341943-3627.400/  
Client Project No.: Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

Attention: Ms. Mary Bourcier

ANALYSIS	Station: HP-9 ACL #: 82689 Received: 04-21-94 Analyzed: 05-04-94 Matrix: Water Units: $\mu\text{g/liter}$	Station: MW-12 ACL #: 82694 Received: 04-21-94 Analyzed: 05-05-94 Matrix: Water Units: $\mu\text{g/liter}$	Station: MW-10 ACL #: 82698 Received: 04-21-94 Analyzed: 05-05-94 Matrix: Water Units: $\mu\text{g/liter}$
ORGANOCHLORINE PESTICIDES (METHOD 608/8080)			
Aldrin	< 0.2	< 0.2	< 0.2
$\alpha$ -BHC	< 0.2	< 0.2	< 0.2
$\beta$ -BHC	< 0.2	< 0.2	< 0.2
$\delta$ -BHC	< 0.2	< 0.2	< 0.2
$\gamma$ -BHC	< 0.2	< 0.2	< 0.2
Chlordane	< 0.4	< 0.4	< 0.4
4,4'DDD	< 0.2	< 0.2	< 0.2
4,4'DDE	< 0.2	< 0.2	< 0.2
4,4'DDT	< 0.2	< 0.2	< 0.2
Dieldrin	< 0.2	< 0.2	< 0.2
Endosulfan I	< 0.2	< 0.2	< 0.2
Endosulfan II	< 0.2	< 0.2	< 0.2
Endosulfan sulfate	< 0.2	< 0.2	< 0.2
Endrin	< 0.2	< 0.2	< 0.2
Endrin aldehyde	< 0.2	< 0.2	< 0.2
Heptachlor	< 0.2	< 0.2	< 0.2
Heptachlor epoxide	< 0.2	< 0.2	< 0.2
Methoxychlor	< 0.2	< 0.2	< 0.2
Toxaphene	< 4.0	< 4.0	< 4.0
PCBs (METHOD 608/8080)			
PCB-1016	< 3.0	< 3.0	< 3.0
PCB-1221	< 7.5	< 7.5	< 7.5
PCB-1232	< 3.0	< 3.0	< 3.0
PCB-1242	< 3.0	< 3.0	< 3.0
PCB-1248	< 1.5	< 1.5	< 1.5
PCB-1254	< 1.5	< 1.5	< 1.5
PCB-1260	< 1.5	< 1.5	< 1.5

**ACL****ADVANCED CHEMISTRY LABS, INC.**DR. STEVE N. TSOUKALAS  
DIRECTORP.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 455-1266Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No.: 943-3627-400/  
Homerville

ACL Project No.: 15880

Date Received: 04-21-94

Report Date: 05-13-94

ANALYSIS	Station: MW-8 ACL #: 82702 Received: 04-21-94 Analyzed: 05-05-94 Matrix: Water Units: µg/liter	Station: HP-9S ACL #: 82704 Received: 04-21-94 Analyzed: 05-05-94 Matrix: Soil Units: µg/kg	Station: ACL #: Received: Analyzed: Matrix: Units:
ORGANOCHLORINE PESTICIDES (METHOD 608/8080)			
Aldrin	< 0.2	< 2.0	
α-BHC	< 0.2	< 2.0	
β-BHC	< 0.2	< 2.0	
γ-BHC	< 0.2	< 2.0	
δ-BHC	< 0.2	< 2.0	
Chlordane	< 0.4	< 5.0	
4,4'DDD	< 0.2	< 2.0	
4,4'DDE	< 0.2	< 2.0	
4,4'DDT	< 0.2	< 2.0	
Dieldrin	< 0.2	< 2.0	
Endosulfan I	< 0.2	< 2.0	
Endosulfan II	< 0.2	< 2.0	
Endosulfan sulfate	< 0.2	< 2.0	
Endrin	< 0.2	< 2.0	
Endrin aldehyde	< 0.2	< 2.0	
Heptachlor	< 0.2	< 2.0	
Heptachlor epoxide	< 0.2	< 2.0	
Methoxychlor	< 0.2	< 2.0	
Toxaphene	< 4.0	< 50.0	
PCBs (METHOD 608/8080)			
PCB-1018	< 3.0	< 30	
PCB-1221	< 7.5	< 75	
PCB-1232	< 3.0	< 30	
CB-1242	< 3.0	< 30	
PCB-1248	< 1.5	< 15	
PCB-1254	< 1.5	< 15	
PCB-1260	< 1.5	< 15	

ACL

# **ADVANCED CHEMISTRY LABS. INC.**

**DR. STEVE N. TSOUKALAS**  
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TELEPHONE (404) 455-1266

**Client:** Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

**Attention: Ms. Mary Bourcier**

943-3627.400/  
Client Project No.: Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94



## *ADVANCED CHEMISTRY LABS, INC.*

**DR. STEVE N. TSOUKALAS**  
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**Client:** Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

**Attention: Ms. Mary Bourcier**

**943-3627.400/**

**Client Project No.: Homerville**

ACL Project No.: 15880

Date Received: 04-21-94

Report Date: 05-13-94

**ACL****ADVANCED CHEMISTRY LABS, INC.**DR. STEVE N. TSOUKALAS  
DIRECTORP.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 455-1266Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

943-3627.400/  
Client Project No.: Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

<b>ANALYSIS</b>	Station: <u>MW-8</u> ACL #: <u>82702</u> Received: <u>04-21-94</u> Analyzed: <u>04-26-94</u> Matrix: <u>Water</u> Units: <u>mg/liter</u>	Station: <u>Lagoon</u> ACL #: <u>82703</u> Received: <u>04-21-94</u> Analyzed: <u>04-26-94</u> Matrix: <u>Water</u> Units: <u>mg/liter</u>	Station: <u>Lagoon Sed</u> ACL #: <u>82705</u> Received: <u>04-21-94</u> Analyzed: <u>04-26-94</u> Matrix: <u>Soil</u> Units: <u>mg/kg</u>
<b>METALS — TAL</b>	Dissolved _____ Total X _____ EP-Toxicity _____ TCLP _____	Dissolved _____ Total X _____ EP-Toxicity _____ TCLP _____	Dissolved _____ Total X _____ EP-Toxicity _____ TCLP _____
Aluminum	60.5	0.83	2730
Antimony	< 0.05	< 0.05	< 5.00
Arsenic	< 0.03	< 0.03	< 5.00
Barium	0.11	0.03	22.0
Beryllium	< 0.01	< 0.01	< 10.0
Cadmium	< 0.01	< 0.01	< 10.0
Calcium	6.88	33.2	716
Chromium	0.07	< 0.02	40.4
Cobalt	< 0.05	< 0.05	< 5.00
Copper	< 0.02	< 0.02	< 10.0
Iron	12.0	0.80	1920
Lead	0.10	< 0.02	54.2
Magnesium	3.24	13.6	121
Manganese	0.12	< 0.05	10.8
Mercury	< 0.001	< 0.001	< 0.50
Nickel	< 0.10	< 0.10	20.3
Potassium	6.52	1.57	< 50.0
Selenium	< 0.04	< 0.04	< 5.00
Silver	< 0.01	< 0.01	< 10.0
Sodium	57.0	8.65	< 50.0
Thallium	< 0.10	< 0.10	< 10.0
Vanadium	0.07	< 0.05	< 25.0
Zinc	0.16	0.12	352



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**Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341**

**943-3627.400/**

**Attention: Ms. Mary Bourcier**

Report Date: 05-13-94

ACL

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**Client:** Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

**943-3627.400/**  
**Client Project No.: Homerville**  
**ACL Project No.: 15880**  
**Date Received: 04-21-94**  
**Report Date: 05-13-94**

**Attention Ms. Mary Bourcier**

**QUALITY CONTROL SECTION**

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

Attention: Ms. Mary Bourcier

**VOLATILE ORGANICS (8240)**  
**SOIL SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	1,2-Dichloro- ethane-d <sub>4</sub> (70-121)	Toluene-d <sub>8</sub> (81-117)	4-Bromofluoro- benzene (74-121)
Soil Blank	103.5	104.3	97.7
82706	105.6	101.5	75.0
82707	107.5	99.3	71.0

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
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Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

Attention: Ms. Mary Bourcier

**VOLATILE ORGANICS (8240)  
WATER SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	1,2-Dichloro- ethane-d <sub>4</sub> (76-114)	Toluene-d <sub>8</sub> (88-110)	4-Bromofluoro- benzene (86-115)
Water Blank	102.2	105.2	99.7
Water Blank	104.6	104.9	99.6
Water Blank	106.1	105.5	99.6
Water Blank	105.2	103.4	97.7
Water Blank	102.9	103.9	96.1
82687	104.3	104.0	100.4
82688	109.5	106.5	101.9
82688-S	106.6	107.2	100.5
82688-SD	106.0	108.7	97.6
82689	101.5	101.9	97.3
82690	100.0	106.5	98.5
82691	102.4	106.5	96.5
82692	108.3	107.3	96.9
82693	102.2	106.3	96.9
82694	103.4	104.8	97.6
82695	103.1	103.8	98.7
82696	100.7	106.4	99.1
82697	105.4	108.7	98.3
82698	104.8	105.0	97.9
82699	106.6	105.3	101.2
82700	94.8	87.9	87.3
82701	96.5	88.7	90.5
82702	92.5	102.2	99.1

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: -----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: -----  
Date Extracted: -----  
Date Analyzed: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: -----

ACL Sample No.: Water Blank

Matrix: Water

ACL Project No.: 15880

Date Sampled: -----

Date Extracted: -----

Date Analyzed: 04-22-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
527-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627, 400/Homerville

Date Received: 04-21-94

Station No: ----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: ----  
Date Extracted: ----  
Date Analyzed: 04-25-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: -----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: -----  
Date Extracted: -----  
Date Analyzed: 04-26-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10-
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: -----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: -----  
Date Extracted: -----  
Date Analyzed: 04-27-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: -----  
ACL Sample No.: Soil Blank  
Matrix: Soil  
ACL Project No.: 15880  
Date Sampled: -----  
Date Extracted: -----  
Date Analyzed: 04-25-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g}/\text{kg}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
4-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
27-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ICL**

**ADVANCED CHEMISTRY LABS, INC.**  
P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341  
  
Attn: Ms. Mary Bourcier

943-3627.400/  
Client Proj. #: Homerville  
ACL Proj. #: 15880  
Date Received 04-21-94  
Report Date: 05-13-94

**VOLATILE ORGANICS (8740)**  
**WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Sample No.	Compound	Spike Added (µg/liter)	Sample Result	Conc. MS	%	Conc. MSD	%	QC Limits		
								Rec	RPD	Recovery
	1,1-Dichloroethene	50	BDL	39.75	79.5	42.03	84.1	5.6	14	61-145
	Trichloroethene	50	BDL	52.20	104.4	52.09	104.2	0.2	14	71-120
<u>87688</u>	Chlorobenzene	50	BDL	52.82	105.6	52.15	104.3	1.3	13	75-130
	Toluene	50	BDL	52.74	105.5	52.15	104.3	1.1	13	76-125
	Benzene	50	BDL	50.16	100.3	50.41	100.8	0.5	11	76-127

**BDL = Below Detection Limit**

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**ACID EXTRACTABLES (8270)  
WATER SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	Phenol-d <sub>6</sub> (10-94)	2-Fluoro- phenol (21-100)	2,4,6-Tribromo- phenol (10-123)
Water Blank	33.4	48.4	62.7
82693	27.5	41.2	57.4
82694	17.0	46.5	61.5
82696	19.1	45.1	59.1
82698	32.7	43.4	61.5
82700	26.5	49.0	67.6
82702	24.6	35.1	54.1
82703	31.9	46.0	66.8

**ACL****ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**BASE/NEUTRAL EXTRACTABLES (8270)  
WATER SURROGATE PERCENT RECOVERY SUMMARY**

Sample No.	Nitro- benzene-d <sub>5</sub> (35-114)	2-Fluoro- biphenyl (43-116)	Terphenyl -d <sub>14</sub> (33-141)
Water Blank	71.1	72.6	82.7
82693	61.4	68.3	87.9
82694	66.4	71.0	75.1
82696	65.5	70.9	69.7
82698	66.0	67.1	71.8
82700	70.3	72.0	61.5
82702	54.7	58.4	71.6
82703	68.7	71.2	77.0

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**ACID EXTRACTABLES (8270)  
SOIL SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	Phenol-d <sub>6</sub> (24-113)	2-Fluoro- phenol (25-121)	2,4,6-Tribromo- phenol (19-122)
Soil Blank	60.2	63.5	38.1
82706	61.3	58.7	47.6

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**BASE/NEUTRAL EXTRACTABLES (8270)  
SOIL SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	Nitro- benzene-d <sub>5</sub> (23-120)	2-Fluoro- biphenyl (30-115)	Terphenyl -d <sub>14</sub> (18-137)
Soil Blank	63.8	67.1	68.0
82706	63.6	64.7	67.4

**ACL****ADVANCED CHEMISTRY LABS, INC.**PO. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: -----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: -----  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
108-95-2	Phenol	BDL	10
95-57-8	2-Chlorophenol	BDL	10
95-48-7	2-Methylphenol	BDL	10
106-44-5	4-Methylphenol	BDL	10
88-75-5	2-Nitrophenol	BDL	10
105-67-9	2,4-Dimethylphenol	BDL	10
65-85-0	Benzoic acid	BDL	50
120-83-2	2,4-Dichlorophenol	BDL	10
59-50-7	4-Chloro-3-methylphenol	BDL	20
88-06-2	2,4,6-Trichlorophenol	BDL	10
95-95-4	2,4,5-Trichlorophenol	BDL	10
51-28-5	2,4-Dinitrophenol	BDL	50
100-02-7	4-Nitrophenol	BDL	50
534-52-1	4,6-Dinitro-2-methylphenol	BDL	50
87-86-5	Pentachlorophenol	BDL	50

B = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: -----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: -----  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	10
541-73-1	1,3-Dichlorobenzene	BDL	10
106-46-7	1,4-Dichlorobenzene	BDL	10
100-51-6	Benzyl alcohol	BDL	20
95-50-1	1,2-Dichlorobenzene	BDL	10
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	10
621-64-7	N-Nitroso-di-n-propylamine	BDL	10
67-72-1	Hexachloroethane	BDL	10
98-95-3	Nitrobenzene	BDL	10
78-59-1	Isophorone	BDL	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	10
120-82-1	1,2,4-Trichlorobenzene	BDL	10
91-20-3	Naphthalene	BDL	10
106-47-8	4-Chloroaniline	BDL	20
87-68-3	Hexachlorobutadiene	BDL	10
91-57-6	2-Methylnaphthalene	BDL	10
77-47-4	Hexachlorocyclopentadiene	BDL	10
91-58-7	2-Chloronaphthalene	BDL	10
88-74-4	2-Nitroaniline	BDL	50
131-11-3	Dimethyl phthalate	BDL	10
208-96-8	Acenaphthylene	BDL	10
606-20-2	2,6-Dinitrotoluene	BDL	10
99-09-2	3-Nitroaniline	BDL	50
83-32-9	Acenaphthene	BDL	10
132-64-9	Dibenzofuran	BDL	10
121-14-2	2,4-Dinitrotoluene	BDL	10
84-66-2	Diethyl phthalate	BDL	10
7005-72-3	4-Chlorophenyl phenyl ether	BDL	10
86-73-7	Fluorene	BDL	10
100-01-6	4-Nitroaniline	BDL	50
86-30-6	N-Nitrosodiphenylamine	BDL	10
101-55-3	4-Bromophenyl phenyl ether	BDL	10
118-74-1	Hexachlorobenzene	BDL	10
85-01-8	Phenanthrene	BDL	10



# ADVANCED CHEMISTRY LABS, INC.

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

## BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Object No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: ----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15880  
Date Sampled: ----  
Date Extracted: 04-26-94  
Date Analyzed: 05-01-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
120-12-7	Anthracene	BDL	10
84-74-2	Di-n-butyl phthalate	BDL	10
206-44-0	Fluoranthene	BDL	10
129-00-0	Pyrene	BDL	10
85-68-7	Butyl benzyl phthalate	BDL	10
91-94-1	3,3'-Dichlorobenzidine	BDL	20
56-55-3	Benzo(a)anthracene	BDL	10
218-01-9	Chrysene	BDL	10
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	10
117-84-0	Di-n-octyl phthalate	BDL	10
205-99-2	Benzo(b)fluoranthene	BDL	10
207-08-9	Benzo(k)fluoranthene	BDL	10
50-32-8	Benzo(a)pyrene	BDL	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	10
53-70-3	Dibenz(a,h)anthracene	BDL	10
191-24-2	Benzo(g,h,i)perylene	BDL	10

L = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: -----

ACL Sample No.: Soil Blank

Matrix: Soil

ACL Project No.: 15880

Date Sampled: -----

Date Extracted: 04-25-94

Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
108-95-2	Phenol	BDL	0.33
95-57-8	2-Chlorophenol	BDL	0.33
95-48-7	2-Methylphenol	BDL	0.33
106-44-5	4-Methylphenol	BDL	0.33
88-75-5	2-Nitrophenol	BDL	0.33
105-67-9	2,4-Dimethylphenol	BDL	0.33
65-85-0	Benzoic acid	BDL	1.65
120-83-2	2,4-Dichlorophenol	BDL	0.33
59-50-7	4-Chloro-3-methylphenol	BDL	0.66
88-06-2	2,4,6-Trichlorophenol	BDL	0.33
95-95-4	2,4,5-Trichlorophenol	BDL	0.33
51-28-5	2,4-Dinitrophenol	BDL	1.65
100-02-7	4-Nitrophenol	BDL	1.65
534-52-1	4,6-Dinitro-2-methylphenol	BDL	1.65
87-86-5	Pentachlorophenol	BDL	1.65

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-21-94

Station No.: -----

ACL Sample No.: Soil Blank

Matrix: Soil

ACL Project No.: 15880

Date Sampled: -----

Date Extracted: 04-25-94

Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	0.33
541-73-1	1,3-Dichlorobenzene	BDL	0.33
106-46-7	1,4-Dichlorobenzene	BDL	0.33
100-51-6	Benzyl alcohol	BDL	0.66
95-50-1	1,2-Dichlorobenzene	BDL	0.33
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	0.33
621-64-7	N-Nitroso-di-n-propylamine	BDL	0.33
67-72-1	Hexachloroethane	BDL	0.33
98-95-3	Nitrobenzene	BDL	0.33
78-59-1	Isophorone	BDL	0.33
111-91-1	bis(2-Chloroethoxy)methane	BDL	0.33
120-82-1	1,2,4-Trichlorobenzene	BDL	0.33
91-20-3	Naphthalene	BDL	0.33
106-47-8	4-Chloroaniline	BDL	0.66
87-68-3	Hexachlorobutadiene	BDL	0.33
91-57-6	2-Methylnaphthalene	BDL	0.33
77-47-4	Hexachlorocyclopentadiene	BDL	0.33
91-58-7	2-Chloronaphthalene	BDL	0.33
88-74-4	2-Nitroaniline	BDL	1.65
131-11-3	Dimethyl phthalate	BDL	0.33
208-96-8	Acenaphthylene	BDL	0.33
606-20-2	2,6-Dinitrotoluene	BDL	0.33
99-09-2	3-Nitroaniline	BDL	1.65
83-32-9	Acenaphthene	BDL	0.33
132-64-9	Dibenzofuran	BDL	0.33
121-14-2	2,4-Dinitrotoluene	BDL	0.33
34-66-2	Diethyl phthalate	BDL	0.33
7005-72-3	4-Chlorophenyl phenyl ether	BDL	0.33
86-73-7	Fluorene	BDL	0.33
100-01-6	4-Nitroaniline	BDL	1.65
86-30-6	N-Nitrosodiphenylamine	BDL	0.33
101-55-3	4-Bromophenyl phenyl ether	BDL	0.33
118-74-1	Hexachlorobenzene	BDL	0.33
95-01-2	Phenanthrene	BDL	0.33

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-21-94

Station No.: ----  
ACL Sample No.: Soil Blank  
Matrix: Soil  
ACL Project No.: 15880  
Date Sampled: ----  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
120-12-7	Anthracene	BDL	0.33
84-74-2	Di-n-butyl phthalate	BDL	0.33
206-44-0	Fluoranthene	BDL	0.33
129-00-0	Pyrene	BDL	0.33
85-68-7	Butyl benzyl phthalate	BDL	0.33
91-94-1	3,3'-Dichlorobenzidine	BDL	0.66
56-55-3	Benzo(a)anthracene	BDL	0.33
218-01-9	Chrysene	BDL	0.33
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	0.33
117-84-0	Di-n-octyl phthalate	BDL	0.33
205-99-2	Benzo(b)fluoranthene	BDL	0.33
207-08-9	Benzo(k)fluoranthene	BDL	0.33
50-32-8	Benzo(a)pyrene	BDL	0.33
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	0.33
53-70-3	Dibenz(a,h)anthracene	BDL	0.33
191-24-2	Benzo(g,h,i)perylene	BDL	0.33

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**CL** | **ANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client:

Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attn:

Ms. Mary Bourcier

Client Proj. #. Homerville  
ACL Proj. #. 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**ACID EXTRACTABLES (8270)**  
**WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Sample No.	Compound	Spike Added (mg/liter)	Sample Result	Conc. MS	Conc. % Rec	QC Limits		
						MSD	% Rec	RPD
	Pentachlorophenol	2.000	BDL	1.104	55.2	1.157	57.9	4.7
	Phenol	2.000	BDL	0.950	47.5	0.968	48.4	1.9
82765	2-Chlorophenol	2.000	BDL	1.211	60.6	1.241	62.1	2.4
	4-Chloro-3-Methylphenol	2.000	BDL	1.156	57.8	1.179	59.0	2.0
	4-Nitrophenol	2.000	BDL	1.089	54.5	0.989	49.5	9.6

**BDL = Below Detection Limit**

**ADVANCED CHEMISTRY LABS, INC.**PO. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attn: Ms. Mary Bourcier

Client Proj. #: Homerville  
ACL Proj. #: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**BASE/NEUTRAL EXTRACTABLES (8270)**  
**WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Sample No.	Compound	Spike Added (mg/L)	Sample Result	Conc. MS	%	Conc. MSD	%	QC Limits		
								Rec	Rec	RPD
	1,2,4-Trichlorobenzene	1.000	BDL	0.694	69.4	0.724	72.4	4.2	28	39-98
	Acenaphthene	1.000	BDL	0.805	80.5	0.827	82.7	2.7	31	46-118
	2,4-Dinitrotoluene	1.000	BDL	0.822	82.2	0.826	82.6	0.5	38	24-96
765	Di-n-Butylphthalate	1.000	BDL	0.827	82.7	0.835	83.5	1.0	40	11-117
	Pyrene	1.000	BDL	1.204	120.4	1.246	124.6	3.4	31	26-127
	N-Nitrosodi-n-propylamine	1.000	BDL	0.635	63.5	0.683	68.3	7.3	38	41-116
	1,4-Dichlorobenzene	1.000	BDL	0.652	65.2	0.680	68.0	4.2	28	36-97

DL = Below Detection Limit

**L** ADDRESSED CHEMISTRY LABS, INC

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client:  
Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Client Proj. #: Homerville  
ACL Proj. #: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

Attn: Ms. Mary Bourcier

**ACID EXTRACTABLES (8270)**  
**SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Sample No.	Compound	Spike Added (mg/kg)	Sample Result	Conc. MS	Conc. % Rec	QC Limits		
						MSD	Rec	RPD
	Pentachlorophenol	20.00	0.91	11.70	54.0	10.81	49.5	7.9
	Phenol	20.00	BDL	10.58	52.9	10.22	51.1	3.5
	2-Chlorophenol	20.00	BDL	11.19	56.0	11.30	56.5	1.0
<u>2797</u>	4-Chloro-3-Methylphenol	20.00	BDL	11.09	55.5	11.34	56.7	2.2
	4-Nitrophenol	20.00	BDL	16.57	82.9	14.40	72.0	14.0

DL = Below Detection Limit

**L** ADVANCED CHEMISTRY LABS, INC.  
P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341  
Attn: Ms. Mary Bourcier

Client Proj. #: 943-3627.400/  
Homerville  
ACL Proj. #: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**BASE/NEUTRAL EXTRACTABLES (8270)**  
**SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Sample No.	Compound	Spike Added (mg/kg)	Sample Result	Conc. % Rec	Conc. % MSD Rec	RPD	RPD Recovery	QC Limits	
								MSD	Rec
	1,2,4-Trichlorobenzene	10.00	BDL	7.02	70.2	7.18	71.8	2.3	23
	Acenaphthene	10.00	0.45	7.61	72.8	7.22	69.1	5.2	38-107
	2,4-Dinitrotoluene	10.00	BDL	8.22	82.2	7.94	79.4	3.4	31-137
	Di-n-Butylphthalate	10.00	BDL	7.30	73.0	7.09	70.9	3.0	47
	Pyrene	10.00	2.08	7.69	63.6	8.44	69.8	9.3	28-89
	N-Nitrosodi-n-propylamine	10.00	BDL	6.76	67.6	5.67	56.7	17.4	41-126
	1,4-Dichlorobenzene	10.00	BDL	6.60	66.0	6.54	65.4	1.0	27
									28-104

IDL = Below Detection Limit

**ACL****ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

943-3627.400/  
Client Project No: Homerville  
ACL Project No: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**PESTICIDES/PCBs (8080)**  
**WATER SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	TCMX (50-150)
Water Blank	80
82689	78
82694	79
82698	83
82702	79

**ACL**

**ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**PESTICIDES/PCBs (8080)  
SOIL SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	TCMX (50-150)
Soil Blank	85
82704	82

**ACL****ADVANCED CHEMISTRY LABS, INC.**DR. STEVE N. TSOUKALAS  
DIRECTORP.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 455-1266Client: Colder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341943-3627.400/  
Client Project No.: Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

Attention: Ms. Mary Bourcier

ANALYSIS	Station: ---- ACL #: Water Blank Received: ---- Analyzed: 05-05-94 Matrix: Water Units: µg/liter	Station: ---- ACL #: Soil Blank Received: ---- Analyzed: 05-05-94 Matrix: Soil Units: µg/kg	Station: _____ ACL #: _____ Received: _____ Analyzed: _____ Matrix: _____ Units: _____
ORGANOCHLORINE PESTICIDES (METHOD 608/8080)			
Aldrin	< 0.2	< 2.0	
α-BHC	< 0.2	< 2.0	
β-BHC	< 0.2	< 2.0	
δ-BHC	< 0.2	< 2.0	
γ-BHC	< 0.2	< 2.0	
Chlordane	< 0.4	< 5.0	
4,4'DDD	< 0.2	< 2.0	
4,4'DDE	< 0.2	< 2.0	
4,4'-DDT	< 0.2	< 2.0	
Dieldrin	< 0.2	< 2.0	
Endosulfan I	< 0.2	< 2.0	
Endosulfan II	< 0.2	< 2.0	
Endosulfan sulfate	< 0.2	< 2.0	
Endrin	< 0.2	< 2.0	
Endrin aldehyde	< 0.2	< 2.0	
Heptachlor	< 0.2	< 2.0	
Heptachlor epoxide	< 0.2	< 2.0	
Methoxychlor	< 0.2	< 2.0	
Toxaphene	< 4.0	< 50.0	
PCBs (METHOD 608/8080)			
PCB-1016	< 3.0	< 30	
PCB-1221	< 7.5	< 75	
PCB-1232	< 3.0	< 30	
PCB-1242	< 3.0	< 30	
PCB-1248	< 1.5	< 15	
PCB-1254	< 1.5	< 15	
PCB-1260	< 1.5	< 15	

**ADVANCED CHEMISTRY LABS, INC.**  
P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Client Proj. #: 913-3627.400/  
Homerville  
ACL Proj. #: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

Attn: Ms. Mary Bourcier

**PESTICIDES/PCBs (8080)**  
**WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Sample No.	Compound	Spike Added (µg/liter)	Sample Result	Conc. MS Rec	Conc. % Rec	Conc. MSD Rec	QC Limits	QC Limits		
								RPD	RPD	RPD Recovery
Lindane		2.000	BDL	1.843	92.2	1.874	93.7	1.3	15	56-123
Heptachlor		2.000	BDL	1.844	92.2	1.826	91.3	1.6	20	40-131
<u>12698</u>	Aldrin	2.000	BDL	1.916	95.8	1.830	91.5	1.0	22	40-120
Dieldrin		5.000	BDL	2.964	59.3	2.965	59.3	4.6	18	52-126
Endrin		5.000	BDL	2.601	52.0	2.614	52.3	0.1	21	56-121
4,4'-DDT		5.000	BDL	3.330	66.6	3.320	66.4	0.5	27	38-127

IDL = Below Detection Limit

**CL****ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client:

Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attn:

Ms. Mary Bourcier

943-3627.400/C

Client Proj. #: Homerville

ACL Proj. #: 15880

Date Received: 04-21-94

Report Date: 05-13-94

**PESTICIDES/PCBs (8080)**  
**SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Sample No.	Compound	Spike Added (mg/kg)	Sample Result	Conc. MS	%	QC Limits		
						Conc. MSD	% Rec	RPD
	Lindane	0.0200	BDL	0.0172	86.0	0.0177	88.5	4.3
	Heptachlor	0.0200	BDL	0.0177	88.6	0.0184	91.8	2.8
<u>82704</u>	Aldrin	0.0200	BDL	0.0178	89.1	0.0185	92.4	3.6
	Dieldrin	0.0500	BDL	0.0282	56.4	0.0289	57.8	3.7
	Endrin	0.0500	BDL	0.0254	50.8	0.0262	52.4	2.4
	4,4'-DDT	0.0500	BDL	0.0312	62.4	0.032	64.4	3.1

BDL = Below Detection Limit

ACL

# *ADVANCED CHEMISTRY LABS, INC.*

**DR. STEVE N. TSOUKALAS**  
**DIRECTOR**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 455-1266

**Client:** Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

943-3627.400/  
Client Project No.: Homerville

ACL Project No.: 15880

Date Received: 04-21-94

Report Date: 05-13-94

**Attention: Ms. Mary Bourcier**



# *ADVANCED CHEMISTRY LABS, INC.*

**DR. STEVE N. TSOUKALAS**  
**DIRECTOR**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 455-1266

**Client: Colder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341**

943-3627.400/  
Client Project No.: Homerville  
ACL Project No.: 15880  
Date Received: 04-21-94  
Report Date: 05-13-94

**Attention: Ms. Mary Bourcier**

ANALYSIS	Station: <u>Lagoon</u>	Station: <u>Background</u>	Station: _____
	ACL #: <u>82703-S</u>	ACL #: <u>82709-S</u>	ACL #: _____
METALS — TAL	Dissolved _____	Dissolved _____	Dissolved _____
Aluminum	108.7	----	
Antimony	100.4	90.9	
Arsenic	94.6	98.6	
Barium	83.4	86.9	
Beryllium	93.8	93.8	
Cadmium	94.7	96.7	
Calcium	86.6	99.8	
Chromium	85.3	86.5	
Cobalt	89.9	91.7	
Copper	93.5	94.3	
Iron	99.0	83.2	
Lead	85.4	91.4	
Magnesium	118.0	86.9	
Manganese	90.2	93.6	
Mercury	----	----	
Nickel	87.5	89.5	
Potassium	102.8	85.2	
Selenium	90.3	97.9	
Silver	72.7	74.3	
Sodium	93.6	95.6	
Thallium	----	----	
Vanadium	----	----	
Unc	91.4	85.8	

1. Goldene Kette  
Location Hixsonville  
ID/Number 943-3637-400  
Apple Type(s) Julietta

### CHIMICAL ANALYSIS

DATE SAMPLED	REMARKS									
	10M	10M	10M	10M	10M	10M	10M	10M	10M	10M
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ble Types) 1. Lines

## CHEMICAL ANALYSIS

SAMPLE IDENTITY	DATE SAMPLED	TIME	REMARKS		
			1	2	3
1	4/18/94	1515	1		
2-1	4/19/94	1225	1		
2-12	"	1315	1		
2-7	"	1325	1		
2-10	"	1330	1		
green	"	1455	1		
2-9	"	1655	1		
2-11	"	1740	1		
2-8	4/20/94	0230	1		

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10 blank

Total No. of Containers

17

Received by John Egan Organization: A.C.C.  
Date: 4/20/94 Time: 11:15 AM

Received by \_\_\_\_\_ Organization: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by \_\_\_\_\_ Organization: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

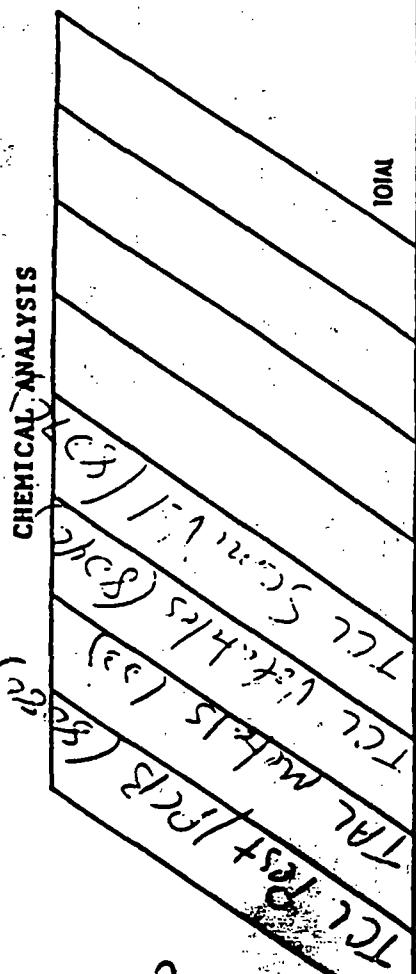
Received by \_\_\_\_\_ Organization: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

Shipping Container ID A.C.C. 10 blank

(attach shipping bill, if any)

Delivery Method: \_\_\_\_\_

Sample ID: K-1  
Location: Hebronville  
Recd/Number: 943-36227400  
Sample Type(s): Soil



### CHEMICAL ANALYSIS

Page 1 of 1

SAMPLE IDENTITY	DATE SAMPLED	REMARKS
S-15	4/18/94 1735	1
Soil Sample	4/19/94 1935	1
S-4	4/20/94 1135	1
S-1	4/20/94 1600	1
S-3	4/20/94 1105	1
Soil Sample	4/20/94 1040	1
Soil Sample	4/20/94 1045	1
No blank		

10

Total No. of Containers

Method: 11 X

(attach shipping bill, if any)

Method: 11 X

**ACL**

MLC

443-3627  
432**ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627,400/Homerville  
Date Received: 04-19-94

Station No.: VSS-2  
ACL Sample No.: 82596  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: -----  
Date Analyzed: 04-22-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g}/\text{kg}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	86J	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	48J	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	79	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

*John Cindro*

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-19-94

Station No.: VSB-1  
ACL Sample No.: 82597  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: ----  
Date Analyzed: 04-22-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g}/\text{kg}$ )	DETECTION LIMIT
74-87-3	-Chloromethane	BDL	10
74-83-9	-Bromomethane	BDL	10
75-01-4	-Vinyl Chloride	BDL	10
75-00-3	-Chloroethane	BDL	10
75-09-2	-Methylene Chloride	BDL	5
67-64-1	-Acetone	BDL	100
75-15-0	-Carbon Disulfide	BDL	5
75-35-4	-1,1-Dichloroethene	BDL	5
75-34-3	-1,1-Dichloroethane	BDL	5
156-60-5	-trans-1,2-Dichloroethene	BDL	5
67-66-3	-Chloroform	BDL	5
107-06-2	-1,2-Dichloroethane	BDL	5
78-93-3	-2-Butanone	BDL	100
71-55-6	-1,1,1-Trichloroethane	BDL	5
56-23-5	-Carbon Tetrachloride	BDL	5
108-05-4	-Vinyl Acetate	BDL	50
75-27-4	-Bromodichloromethane	BDL	5
78-87-5	-1,2-Dichloropropane	BDL	5
10061-01-5	-cis-1,3-Dichloropropene	BDL	5
79-01-6	-Trichloroethene	BDL	5
124-48-1	-Dibromochloromethane	BDL	5
79-00-5	-1,1,2-Trichloroethane	BDL	5
71-43-2	-Benzene	BDL	5
10061-02-6	-trans-1,3-Dichloropropene	BDL	5
75-25-2	-Bromoform	BDL	5
108-10-1	-4-Methyl-2-Pentanone	BDL	50
591-78-6	-2-Hexanone	BDL	50
127-18-4	-Tetrachloroethene	BDL	5
79-34-5	-1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	-Toluene	BDL	5
108-90-7	-Chlorobenzene	BDL	5
100-41-4	-Ethylbenzene	BDL	5
100-42-5	-Styrene	BDL	5
1330-20-7	-Xylenes (total)	BDL	5
156-59-2	-cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627-400/Homerville  
Date Received: 04-19-94

Station No.: VSB-2  
ACL Sample No.: 82598  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: ----  
Date Analyzed: 04-22-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g}/\text{kg}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: SG-6-4  
ACL Sample No.: 82599  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: ----  
Date Analyzed: 04-25-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g}/\text{kg}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	65J	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	4J	5
75-34-3	1,1-Dichloroethane	12	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	15J	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	3J	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	9	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	2J	5
100-42-5	Styrene	2J	5
1330-20-7	Xylenes (total)	18	5
156-59-2	cis-1,2-Dichloroethene	2J	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: SG-5-4

ACL Sample No.: 82600

Matrix: Water

ACL Project No.: 15861

Date Sampled: 04-17-94

Date Extracted: ----

Date Analyzed: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	4J	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	4J	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	40	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	423	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: SG-4-5  
ACL Sample No.: 82601  
Matrix: Water  
ACL Project No.: 15861  
Date Sampled: 04-17-94  
Date Extracted: ----  
Date Analyzed: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	7J	10
75-00-3	Chloroethane	62	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	4J	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627,400/Homerville

Date Received: 04-19-94

Station No.: SG-6-10

ACL Sample No.: 82602

Matrix: Water

ACL Project No.: 15861

Date Sampled: 04-17-94

Date Extracted: ----

Date Analyzed: 04-22-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
74-87-3	Chloromethane	BDL	100
74-83-9	Bromomethane	BDL	100
75-01-4	Vinyl Chloride	8820	100
75-00-3	Chloroethane	BDL	100
75-09-2	Methylene Chloride	81	50
67-64-1	Acetone	BDL	1000
75-15-0	Carbon Disulfide	BDL	50
75-35-4	1,1-Dichloroethene	9840	50
75-34-3	1,1-Dichloroethane	5440	50
156-60-5	trans-1,2-Dichloroethene	59	50
67-66-3	Chloroform	BDL	50
107-06-2	1,2-Dichloroethane	408	50
78-93-3	2-Butanone	BDL	1000
71-55-6	1,1,1-Trichloroethane	360	50
56-23-5	Carbon Tetrachloride	BDL	50
108-05-4	Vinyl Acetate	BDL	500
75-27-4	Bromodichloromethane	BDL	50
78-87-5	1,2-Dichloropropane	BDL	50
10061-01-5	cis-1,3-Dichloropropene	BDL	50
79-01-6	Trichloroethene	69	50
124-48-1	Dibromochloromethane	BDL	50
79-00-5	1,1,2-Trichloroethane	27J	50
71-43-2	Benzene	BDL	50
10061-02-6	trans-1,3-Dichloropropene	BDL	50
75-25-2	Bromoform	BDL	50
108-10-1	4-Methyl-2-Pentanone	BDL	500
591-78-6	2-Hexanone	BDL	500
127-18-4	Tetrachloroethene	149	50
79-34-5	1,1,2,2-Tetrachloroethane	BDL	50
108-88-3	Toluene	99	50
108-90-7	Chlorobenzene	BDL	50
100-41-4	Ethylbenzene	BDL	50
100-42-5	Styrene	BDL	50
1330-20-7	Xylenes (total)	36J	50
156-59-2	cis-1,2-Dichloroethene	4350	50

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-19-94

Station No.: VSB-2  
ACL Sample No.: 82598  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: 04-25-94  
Date Analyzed: 04-29-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
108-95-2	Phenol	BDL	0.33
95-57-8	2-Chlorophenol	BDL	0.33
95-48-7	2-Methylphenol	BDL	0.33
106-44-5	4-Methylphenol	BDL	0.33
88-75-5	2-Nitrophenol	BDL	0.33
105-67-9	2,4-Dimethylphenol	BDL	0.33
65-85-0	Benzotic acid	BDL	1.65
120-83-2	2,4-Dichlorophenol	BDL	0.33
59-50-7	4-Chloro-3-methylphenol	BDL	0.66
88-06-2	2,4,6-Trichlorophenol	BDL	0.33
95-95-4	2,4,5-Trichlorophenol	BDL	0.33
51-28-5	2,4-Dinitrophenol	BDL	1.65
100-02-7	4-Nitrophenol	BDL	1.65
534-52-1	4,6-Dinitro-2-methylphenol	BDL	1.65
87-86-5	Pentachlorophenol	BDL	1.65

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: VSB-2

ACL Sample No.: 82598

Matrix: Soil

ACL Project No.: 15861

Date Sampled: 04-16-94

Date Extracted: 04-25-94

Date Analyzed: 04-29-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	0.33
541-73-1	1,3-Dichlorobenzene	BDL	0.33
106-46-7	1,4-Dichlorobenzene	BDL	0.33
100-51-6	Benzyl alcohol	BDL	0.66
95-50-1	1,2-Dichlorobenzene	BDL	0.33
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	0.33
621-64-7	N-Nitroso-di-n-propylamine	BDL	0.33
67-72-1	Hexachloroethane	BDL	0.33
98-95-3	Nitrobenzene	BDL	0.33
78-59-1	Isophorone	BDL	0.33
111-91-1	bis(2-Chloroethoxy)methane	BDL	0.33
120-82-1	1,2,4-Trichlorobenzene	BDL	0.33
91-20-3	Naphthalene	BDL	0.33
106-47-8	4-Chloroaniline	BDL	0.66
87-68-3	Hexachlorobutadiene	BDL	0.33
91-57-6	2-Methylnaphthalene	BDL	0.33
77-47-4	Hexachlorocyclopentadiene	BDL	0.33
91-58-7	2-Choronaphthalene	BDL	0.33
88-74-4	2-Nitroaniline	BDL	1.65
131-11-3	Dimethyl phthalate	BDL	0.33
208-96-8	Acenaphthylene	BDL	0.33
606-20-2	2,6-Dinitrotoluene	BDL	0.33
99-09-2	3-Nitroaniline	BDL	1.65
83-32-9	Acenaphthene	BDL	0.33
132-64-9	Dibenzofuran	BDL	0.33
121-14-2	2,4-Dinitrotoluene	BDL	0.33
84-66-2	Diethyl phthalate	BDL	0.33
7005-72-3	4-Chlorophenyl phenyl ether	BDL	0.33
86-73-7	Fluorene	BDL	0.33
100-01-6	4-Nitroaniline	BDL	1.65
86-30-6	N-Nitrosodiphenylamine	BDL	0.33
101-55-3	4-Bromophenyl phenyl ether	BDL	0.33
118-74-1	Hexachlorobenzene	BDL	0.33
85-01-8	Phenanthrene	BDL	0.33

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: VSB-2  
ACL Sample No.: 82598  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: 04-25-94  
Date Analyzed: 04-29-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
120-12-7	Anthracene	BDL	0.33
84-74-2	Di-n-butyl phthalate	BDL	0.33
206-44-0	Fluoranthene	BDL	0.33
129-00-0	Pyrene	BDL	0.33
85-68-7	Butyl benzyl phthalate	BDL	0.33
91-94-1	3,3'-Dichlorobenzidine	BDL	0.66
56-55-3	Benzo(a)anthracene	BDL	0.33
218-01-9	Chrysene	BDL	0.33
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	0.33
117-84-0	Di-n-octyl phthalate	BDL	0.33
205-99-2	Benzo(b)fluoranthene	BDL	0.33
207-08-9	Benzo(k)fluoranthene	BDL	0.33
50-32-8	Benzo(a)pyrene	BDL	0.33
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	0.33
53-70-3	Dibenz(a,h)anthracene	BDL	0.33
191-24-2	Benzo(g,h,i)perylene	BDL	0.33

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Colder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Station No.: SG-6-4  
ACL Sample No.: 82599  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-19-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
108-95-2	Phenol	BDL	0.33
95-57-8	2-Chlorophenol	BDL	0.33
95-48-7	2-Methylphenol	BDL	0.33
106-44-5	4-Methylphenol	0.55	0.33
88-75-5	2-Nitrophenol	BDL	0.33
105-67-9	2,4-Dimethylphenol	BDL	0.33
65-85-0	Benzoic acid	BDL	1.65
120-83-2	2,4-Dichlorophenol	BDL	0.33
59-50-7	4-Chloro-3-methylphenol	BDL	0.66
88-06-2	2,4,5-Trichlorophenol	BDL	0.33
95-95-4	2,4,5-Trichlorophenol	BDL	0.33
51-28-5	2,4-Dinitrophenol	BDL	1.65
100-02-7	4-Nitrophenol	BDL	1.65
534-52-1	4,6-Dinitro-2-methylphenol	BDL	1.65
87-86-5	Pentachlorophenol	BDL	1.65

BDL = Below Detection Limit

LT = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: SG-6-4  
ACL Sample No.: 82599  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	0.33
541-73-1	1,3-Dichlorobenzene	BDL	0.33
106-46-7	1,4-Dichlorobenzene	BDL	0.33
100-51-6	Benzyl alcohol	BDL	0.66
95-50-1	1,2-Dichlorobenzene	BDL	0.33
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	0.33
621-64-7	N-Nitroso-di-n-propylamine	BDL	0.33
67-72-1	Hexachloroethane	BDL	0.33
98-95-3	Nitrobenzene	BDL	0.33
78-59-1	Isophorone	BDL	0.33
111-91-1	bis(2-Chloroethoxy)methane	BDL	0.33
120-82-1	1,2,4-Trichlorobenzene	BDL	0.33
91-20-3	Naphthalene	BDL	0.33
106-47-8	4-Chloroaniline	BDL	0.66
87-68-3	Hexachlorobutadiene	BDL	0.33
91-57-6	2-Methylnaphthalene	BDL	0.33
77-47-4	Hexachlorocyclopentadiene	BDL	0.33
91-58-7	2-Chloronaphthalene	BDL	0.33
88-74-4	2-Nitroaniline	BDL	1.65
131-11-3	Dimethyl phthalate	BDL	0.33
208-96-8	Acenaphthylene	BDL	0.33
606-20-2	2,6-Dinitrotoluene	BDL	0.33
99-09-2	3-Nitroaniline	BDL	1.65
83-32-9	Acenaphthene	BDL	0.33
132-64-9	Dibenzo furan	BDL	0.33
121-14-2	2,4-Dinitrotoluene	BDL	0.33
84-66-2	Diethyl phthalate	BDL	0.33
7005-72-3	4-Chlorophenyl phenyl ether	BDL	0.33
86-73-7	Fluorene	BDL	0.33
100-01-6	4-Nitroaniline	BDL	1.65
86-30-6	N-Nitrosodiphenylamine	BDL	0.33
101-55-3	4-Bromophenyl phenyl ether	BDL	0.33
118-74-1	Hexachlorobenzene	BDL	0.33
85-01-8	Phenanthrene	BDL	0.33

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: SG-6-4  
ACL Sample No.: 82599  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: 04-16-94  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
120-12-7	Anthracene	BDL	0.33
84-74-2	Di-n-butyl phthalate	BDL	0.33
206-44-0	Fluoranthene	BDL	0.33
129-00-0	Pyrene	BDL	0.33
85-68-7	Butyl benzyl phthalate	BDL	0.33
91-94-1	3,3-Dichlorobenzidine	BDL	0.66
56-55-3	Benzo(a)anthracene	BDL	0.33
218-01-9	Chrysene	BDL	0.33
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	0.33
117-84-0	Di-n-octyl phthalate	BDL	0.33
205-99-2	Benzo(b)fluoranthene	BDL	0.33
207-08-9	Benzo(k)fluoranthene	BDL	0.33
50-32-8	Benzo(a)pyrene	BDL	0.33
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	0.33
53-70-3	Dibenz(a,h)anthracene	BDL	0.33
191-24-2	Benzo(g,h,i)perylene	BDL	0.33

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL**

**ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

**943-3627.400/**

**Client:** Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

**Client Project No.:** Homerville

**ACL Project No.:** 15861

**Date Received:** 04-19-94

**Report Date:** 05-06-94

**Attention:** Ms. Mary Bourcier

**STATION:**  
**ACL #:**

**SG-5-4S**  
82603

**MATRIX:**

**Soil**

**Parameters:**

n-Hexane (mg/kg) ..... < 0.01

**CL**

**ANNEID CHEMISTRY LABS. INC.**  
P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client: Colder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341  
  
Attn: Ms. Mary Bourcier

Client Proj. #: Homerville  
ACL Proj. #: 15861  
Date Received: 04-19-94  
Report Date: 05-06-94

STATION:  
ACL #:

SC-5-4S  
82603

Analytical Method Used

Total Recoverable Petroleum Hydrocarbons

89.6

Units	mg/kg
Matrix	7.5
Sample Collection Date	04-17-94
Sample Received Date	04-19-94
Sample Preparation/Extraction Date	04-25-94
Sample Analysis Date	04-25-94
Name of Analyst	MM

BDL = Below Detection Limit

ACL

# *ADVANCED CHEMISTRY LABS, INC.*

**DR. STEVE N. TSOUKALAS**  
**DIRECTOR**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 455-1266

**Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341**

**Client Project No.: Homerville**

ACL Project No.: 15861

Date Received: 04-19-94

Report Date: 05-06-94

**Attention: Ms. Mary Bourcier**

**QUALITY CONTROL SECTION**

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15861  
Date Received: 04-19-94  
Report Date: 05-06-94

**VOLATILE ORGANICS (8240)**  
**SOIL SURROGATE PERCENT RECOVERY SUMMARY**

Sample No.	1,2-Dichloro-ethane-d <sub>4</sub> (70-121)	Toluene-d <sub>8</sub> (81-117)	4-Bromofluorobenzene (74-121)
Soil Blank	103.8	103.7	96.6
Soil Blank	103.5	104.3	97.7
82596	101.8	108.7	94.1
82597	103.6	103.6	87.1
82597-S	98.9	103.8	86.6
82597-SD	99.0	108.4	90.7
82598	103.2	101.9	87.1
82599	103.6	104.6	86.5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15861  
Date Received: 04-19-94  
Report Date: 05-06-94

**VOLATILE ORGANICS (8240)**  
**WATER SURROGATE PERCENT RECOVERY SUMMARY**

Sample No.	1,2-Dichloro-ethane-d <sub>4</sub> (76-114)	Toluene-d <sub>8</sub> (88-110)	4-Bromofluoro-benzene (86-115)
Water Blank	102.5	105.3	95.6
Water Blank	102.2	105.2	99.7
Water Blank	104.6	104.9	99.6
82600	102.2	105.3	102.6
82601	100.8	106.5	94.3
82602	112.7	106.9	101.3

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: -----  
ACL Sample No.: Soil Blank  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: -----  
Date Extracted: -----  
Date Analyzed: 04-22-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g}/\text{kg}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-7	cis-1,2-Dichloroethene	RDI	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: -----

ACL Sample No.: Soil Blank

Matrix: Soil

ACL Project No.: 15861

Date Sampled: -----

Date Extracted: -----

Date Analyzed: 04-25-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g}/\text{kg}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10-
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: -----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15861  
Date Sampled: -----  
Date Extracted: -----  
Date Analyzed: 04-20-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,3-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary BourcierProject No.: 943-3627.400/HomervilleDate Received: 04-19-94

Station No.: -----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15861  
Date Sampled: -----  
Date Extracted: -----  
Date Analyzed: 04-21-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
4-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
27-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**PO. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary BourcierProject No.: 943-3627.400/HomervilleDate Received: 04-19-94

Station No.: -----  
ACL Sample No.: Water Blank  
Matrix: Water  
ACL Project No.: 15861  
Date Sampled: -----  
Date Extracted: -----  
Date Analyzed: 04-22-94

CAS NO.	COMPOUND	RESULT ( $\mu\text{g/liter}$ )	DETECTION LIMIT
74-87-3	Chloromethane	BDL	10
74-83-9	Bromomethane	BDL	10
75-01-4	Vinyl Chloride	BDL	10
75-00-3	Chloroethane	BDL	10
75-09-2	Methylene Chloride	BDL	5
67-64-1	Acetone	BDL	100
75-15-0	Carbon Disulfide	BDL	5
75-35-4	1,1-Dichloroethene	BDL	5
75-34-3	1,1-Dichloroethane	BDL	5
156-60-5	trans-1,2-Dichloroethene	BDL	5
67-66-3	Chloroform	BDL	5
107-06-2	1,2-Dichloroethane	BDL	5
78-93-3	2-Butanone	BDL	100
71-55-6	1,1,1-Trichloroethane	BDL	5
56-23-5	Carbon Tetrachloride	BDL	5
108-05-4	Vinyl Acetate	BDL	50
75-27-4	Bromodichloromethane	BDL	5
78-87-5	1,2-Dichloropropane	BDL	5
10061-01-5	cis-1,3-Dichloropropene	BDL	5
79-01-6	Trichloroethene	BDL	5
124-48-1	Dibromochloromethane	BDL	5
79-00-5	1,1,2-Trichloroethane	BDL	5
71-43-2	Benzene	BDL	5
10061-02-6	trans-1,3-Dichloropropene	BDL	5
75-25-2	Bromoform	BDL	5
108-10-1	4-Methyl-2-Pentanone	BDL	50
591-78-6	2-Hexanone	BDL	50
127-18-4	Tetrachloroethene	BDL	5
79-34-5	1,1,2,2-Tetrachloroethane	BDL	5
108-88-3	Toluene	BDL	5
108-90-7	Chlorobenzene	BDL	5
100-41-4	Ethylbenzene	BDL	5
100-42-5	Styrene	BDL	5
1330-20-7	Xylenes (total)	BDL	5
156-59-2	cis-1,2-Dichloroethene	BDL	5

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Client Project No.: 943-3627.400/  
Homerville  
ACL Project No.: 15861  
Date Received: 04-19-94  
Report Date: 05-06-94

Attention: Ms. Mary Bourcier

**BASE/NEUTRAL EXTRACTABLES (8270)  
SOIL SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	<u>Nitro- benzene-d<sub>5</sub> (23-120)</u>	<u>2-Fluoro- biphenyl (30-115)</u>	<u>Terphenyl -d<sub>14</sub> (18-137)</u>
Soil Blank	63.8	67.1	68.0
82598	73.7	63.7	65.7
82599	65.3	65.8	68.5

**CL**

**ADVANCED CHEMISTRY LABS, INC.**  
P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

Client:

Golder Associates

943-3627.400/  
Client Proj. # Homerville

3730 Chamblee Tucker Road  
Atlanta, GA 30341

ACL Proj. # 15861

Date Received: 04-19-94

Report Date: 05-06-94

Attn: Ms. Mary Bourcier

**VOLATILE ORGANICS (8240)**  
**SOIL MATRIX SPIKE/MATRIX DUPLICATE RECOVERY**

Sample No.	Compound	Spike Added ( $\mu\text{g}/\text{kg}$ )	Sample Result	Conc. MS	Conc. % Rec	Conc. % MSD	% Rec	QC Limits		
								RPD	RPD	Recovery
	1,1-Dichloroethene	50	BDL	45.27	90.5	43.68	87.4	3.6	22	59-172
	Trichloroethene	50	BDL	52.74	105.5	54.70	109.4	3.6	24	62-137
82597	Chlorobenzene	50	BDL	53.56	107.1	52.66	105.3	1.7	21	60-133
	Toluene	50	BDL	53.30	106.6	54.58	109.2	2.4	21	59-139
	Benzene	50	BDL	49.94	99.9	51.57	103.1	3.2	21	66-142

BDL = Below Detection Limit

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Client Project No: 943-3627.400/  
Homerville

ACL Project No: 15861

Date Received: 04-19-94

Report Date: 05-06-94

**ACID EXTRACTABLES (8270)**  
**SOIL SURROGATE PERCENT RECOVERY SUMMARY**

<u>Sample No.</u>	<u>Phenol-d<sub>6</sub> (24-113)</u>	<u>2-Fluoro- phenol (25-121)</u>	<u>2,4,6-Tribromo- phenol (19-122)</u>
Soil Blank	60.2	63.5	38.1
82598	64.4	65.3	45.9
82599	62.6	61.0	47.8

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**ACIDS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-19-94

Station No.: -----  
ACL Sample No.: Soil Blank  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: -----  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
108-95-2	Phenol	BDL	0.33
95-57-8	2-Chlorophenol	BDL	0.33
95-48-7	2-Methylphenol	BDL	0.33
106-44-5	4-Methylphenol	BDL	0.33
88-75-5	2-Nitrophenol	BDL	0.33
105-67-9	2,4-Dimethyphenol	BDL	0.33
65-85-0	Benzoic acid	BDL	1.65
120-83-2	2,4-Dichlorophenol	BDL	0.33
59-50-7	4-Chloro-3-methylphenol	BDL	0.66
88-06-2	2,4,5-Trichlorophenol	BDL	0.33
95-95-4	2,4,5-Trichlorophenol	BDL	0.33
51-28-5	2,4-Dinitrophenol	BDL	1.65
100-02-7	4-Nitrophenol	BDL	1.65
534-52-1	4,6-Dinitro-2-methylphenol	BDL	1.65
87-86-5	Pentachlorophenol	BDL	1.65

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: -----

ACL Sample No.: Soil Blank

Matrix: Soil

ACL Project No.: 15861

Date Sampled: -----

Date Extracted: 04-25-94

Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
111-44-4	bis(2-Chloroethyl)ether	BDL	0.33
541-73-1	1,3-Dichlorobenzene	BDL	0.33
106-46-7	1,4-Dichlorobenzene	BDL	0.33
100-51-6	Benzyl alcohol	BDL	0.66
95-50-1	1,2-Dichlorobenzene	BDL	0.33
39638-32-9	bis(2-Chloroisopropyl)ether	BDL	0.33
621-64-7	N-Nitroso-di-n-propylamine	BDL	0.33
67-72-1	Hexachloroethane	BDL	0.33
98-95-3	Nitrobenzene	BDL	0.33
78-59-1	Isophorone	BDL	0.33
111-91-1	bis(2-Chloroethoxy)methane	BDL	0.33
120-82-1	1,2,4-Trichlorobenzene	BDL	0.33
91-20-3	Naphthalene	BDL	0.33
106-47-8	4-Chloroaniline	BDL	0.66
87-68-3	Hexachlorobutadiene	BDL	0.33
91-57-6	2-Methylnaphthalene	BDL	0.33
77-47-4	Hexachlorocyclopentadiene	BDL	0.33
91-58-7	2-Choronaphthalene	BDL	0.33
88-74-4	2-Nitroaniline	BDL	1.65
131-11-3	Dimethyl phthalate	BDL	0.33
208-96-8	Acenaphthylene	BDL	0.33
606-20-2	2,6-Dinitrotoluene	BDL	0.33
99-09-2	3-Nitroaniline	BDL	1.65
83-32-9	Acenaphthene	BDL	0.33
132-64-9	Dibenzofuran	BDL	0.33
121-14-2	2,4-Dinitrotoluene	BDL	0.33
84-66-2	Diethyl phthalate	BDL	0.33
7005-72-3	4-Chlorophenyl phenyl ether	BDL	0.33
86-73-7	Fluorene	BDL	0.33
100-01-6	4-Nitroaniline	BDL	1.65
86-30-6	N-Nitrosodiphenylamine	BDL	0.33
101-55-3	4-Bromophenyl phenyl ether	BDL	0.33
118-74-1	Hexachlorobenzene	BDL	0.33
85-01-8	Phenanthrene	BDL	0.33

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**BASE/NEUTRALS (cont'd) - SW-846, METHOD 8270**

Client Name: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier

Project No.: 943-3627.400/Homerville

Date Received: 04-19-94

Station No.: ----  
ACL Sample No.: Soil Blank  
Matrix: Soil  
ACL Project No.: 15861  
Date Sampled: ----  
Date Extracted: 04-25-94  
Date Analyzed: 04-28-94

CAS NO.	COMPOUND	RESULT (mg/kg)	DETECTION LIMIT
120-12-7	Anthracene	BDL	0.33
84-74-2	Di-n-butyl phthalate	BDL	0.33
206-44-0	Fluoranthene	BDL	0.33
129-00-0	Pyrene	BDL	0.33
85-68-7	Butyl benzyl phthalate	BDL	0.33
91-94-1	3,3-Dichlorobenzidine	BDL	0.66
56-55-3	Benzo(a)anthracene	BDL	0.33
218-01-9	Chrysene	BDL	0.33
117-81-7	bis(2-Ethylhexyl) phthalate	BDL	0.33
117-84-0	Di-n-octyl phthalate	BDL	0.33
205-99-2	Benzo(b)fluoranthene	BDL	0.33
207-08-9	Benzo(k)fluoranthene	BDL	0.33
50-32-8	Benzo(a)pyrene	BDL	0.33
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	0.33
53-70-3	Dibenz(a,h)anthracene	BDL	0.33
191-24-2	Benzo(g,h,i)perylene	BDL	0.33

BDL = Below Detection Limit

J = Less Than Detection Limit, Approximate Value

ACL

# *ADVANCED CHEMISTRY LABS, INC.*

**DR. STEVE N. TSOUKALAS**  
**DIRECTOR**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 455-1266

**Client:** Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

**Attention: Ms. Mary Bourcier**

**Client Project No.: Homerville**

ACL Project No.: 15861

Date Received: 04-19-94

**Report Date:** 05-06-94

ANALYSIS	Station: <u>----</u>	Station: <u>          </u>	Station: <u>          </u>
	ACL #: <u>Soil Blank</u>	ACL #: <u>          </u>	ACL #: <u>          </u>
	Received: <u>-----</u>	Received: <u>          </u>	Received: <u>          </u>
	Analyzed: <u>04-26-94</u>	Analyzed: <u>          </u>	Analyzed: <u>          </u>
	Matrix: <u>Soil</u>	Matrix: <u>          </u>	Matrix: <u>          </u>
	Units: <u>mg/kg</u>	Units: <u>          </u>	Units: <u>          </u>
METALS — TAL	Dissolved _____ Total <u>X</u> EP-Toxicity _____ TCLP _____	Dissolved _____ Total _____ EP-Toxicity _____ TCLP _____	Dissolved _____ Total _____ EP-Toxicity _____ TCLP _____
Aluminum	< 5.00		
Antimony	< 2.50		
Arsenic	< 2.50		
Barium	< 10.0		
Beryllium	< 10.0		
Cadmium	< 2.50		
Calcium	< 75.0		
Chromium	< 5.00		
Cobalt	< 5.00		
Copper	< 5.00		
Iron	< 10.0		
Lead	< 5.00		
Magnesium	< 5.00		
Manganese	< 2.50		
Mercury	< 0.50		
Nickel	< 5.00		
Potassium	< 10.0		
Selenium	< 2.50		
Silver	< 5.00		
Sodium	< 50.0		
Thallium	< 5.00		
Vanadium	< 10.0		
Zinc	< 3.00		

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## Chemical Analysis

(middle) / k + e

ion Hanover

9113-34-07-4 Market Sci.

**DATE  
SAMPLED**

1987 May 25: 1987-05-25

1976, 66(1), 1-10  
© 1976 by the American Medical Association.

Time: 1200

shed by:

Time: \_\_\_\_\_

lized by: \_\_\_\_\_ Organization: \_\_\_\_\_

Time: 10:00 AM 5/10/03 97-0002  
Method: Hand X 510397-0002 attach shipping bill, if any

三

Received by: S. Tracy Organization: Aa

Date: 4-19-94 Time: 9:19 a.m.

Received by \_\_\_\_\_ Organization: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_ Time: \_\_\_\_\_ Organization: \_\_\_\_\_

Date: \_\_\_\_\_ Time: AC-1

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**ACL**

**ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

Homerville

Client Project No.: 943-3627.400  
ACL Project No.: 15860  
Date Received: 04-19-94  
Report Date: 04-27-94

STATION:  
ACL #:

SC-5-4  
82595

MATRIX:

Water

Parameters:

n-Hexane (mg/liter) ..... 0.189

MC15 - 943-3627  
43

29

*John Andros*  
John Andros  
Lab Manager

**ICL**

**ADVANCED CHEMISTRY LABS, INC.**  
PO. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444

**Client:**

Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

**Attn:**

Ms. Mary Bourcier

**ACL Proj. #:**

15860

**Date Received:**

04-19-94

**Report Date:**

04-27-94

**Homerville**

**Client Proj. #:** 943-3627-400

**ACL Proj. #:**

15860

**Date Received:**

04-19-94

**Report Date:**

04-27-94

**STATION:**  
**ACL #:**

SG-5-4  
82595

**Analytical Method Used**

418.1

**Total Recoverable Petroleum Hydrocarbons**

3.4

<b>Units</b>	<b>mg/liter</b>
<b>Deletion Limit</b>	<u>0.5</u>
<b>Matrix</b>	<u>Water</u>
<b>Sample Collection Date</b>	<u>04-17-94</u>
<b>Sample Received Date</b>	<u>04-19-94</u>
<b>Sample Preparation/Extraction Date</b>	<u>04-25-94</u>
<b>Sample Analysis Date</b>	<u>04-25-94</u>
<b>Name of Analyst</b>	<u>MM</u>

**BDL = Below Detection Limit**

Color: Yellow  
Location: Hendersonville  
Object/Number: 94.3.36227.1.1.c  
Sample Type(s): Sectee

## CHEMICAL ANALYSIS

Temperature of water : 12°C

Page 1 of 1

John C. Bealley

Exhibited at the Boston Exposition: 1851 Color Class

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1

Received by: C. Tracy Organization: AOL  
Date: 4-19-94 Time: 9:19 a.m.

Received by: \_\_\_\_\_ Organization: \_\_\_\_\_

Date: \_\_\_\_\_ Received by: \_\_\_\_\_ Time: \_\_\_\_\_ Organization: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

[attach shipping bill, if any)

Shipping Container ID: AC4-150

**ACL****ADVANCED CHEMISTRY LABS, INC.**P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
TELEPHONE (404) 409-1444**VOLATILE ORGANICS - SW-846, METHOD 8240**

Client Name: Colder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Contact: Ms. Mary Bourcier  
Project No.: 943-3627.400/Homerville  
Date Received: 04-22-94

Station No.: MW-3(Bottom Layer)  
ACL Sample No.: 82778  
Matrix: Water  
ACL Project No.: 15887  
Date Sampled: 04-19-94  
Date Extracted: ----  
Date Analyzed: 04-27-94

CAS NO.	COMPOUND	RESULT ( $\mu$ g/liter)	DETECTION LIMIT
74-87-3	Chloromethane	BDL	250
74-83-9	Bromomethane	BDL	250
75-01-4	Vinyl Chloride	BDL	250
75-00-3	Chloroethane	937	250
75-09-2	Methylene Chloride	BDL	125
67-64-1	Acetone	BDL	2500
75-15-0	Carbon Disulfide	BDL	125
75-35-4	1,1-Dichloroethene	101J	125
75-34-3	1,1-Dichloroethane	761	125
156-60-5	trans-1,2-Dichloroethene	BDL	125
67-66-3	Chloroform	BDL	125
107-06-2	1,2-Dichloroethane	BDL	125
78-93-3	2-Butanone	BDL	2500
71-55-6	1,1,1-Trichloroethane	BDL	125
56-23-5	Carbon Tetrachloride	BDL	125
108-05-4	Vinyl Acetate	BDL	1250
75-27-4	Bromodichloromethane	BDL	125
78-87-5	1,2-Dichloropropane	BDL	125
10061-01-5	cis-1,3-Dichloropropene	BDL	125
79-01-6	Trichloroethene	BDL	125
124-48-1	Dibromochloromethane	BDL	125
79-00-5	1,1,2-Trichloroethane	BDL	125
71-43-2	Benzene	88J	125
10061-02-6	trans-1,3-Dichloropropene	BDL	125
75-25-2	Bromoform	BDL	125
108-10-1	4-Methyl-2-Pentanone	BDL	1250
591-78-6	2-Hexanone	BDL	1250
127-18-4	Tetrachloroethene	BDL	125
79-34-5	1,1,2,2-Tetrachloroethane	BDL	125
108-88-3	Toluene	522	125
108-90-7	Chlorobenzene	BDL	125
100-41-4	Ethylbenzene	167	125
100-42-5	Styrene	BDL	125
1330-20-7	Xylenes (total)	7520	125
156-59-2	cis-1,2-Dichloroethene	BDL	125

**ACL**

**ADVANCED CHEMISTRY LABS, INC.**

P.O. BOX 88610 • ATLANTA, GEORGIA 30356  
PHONE (404) 409-1444 • FAX (404) 409-1844

Client: Golder Associates  
3730 Chamblee Tucker Road  
Atlanta, GA 30341

Attention: Ms. Mary Bourcier

943-3627.400/

Client Project No.: Homerville  
ACL Project No.: 15887  
Date Received: 04-19-94  
Report Date: 04-28-94

STATION:  
ACL #:

MW-3  
(Top Layer)  
82778

MATRIX:

Liquid

Parameters:

Fuel ID (GC Scan) ..... Mineral Spirits Range

# CHAIN OF CUSTODY RECORD

Sample ID: 10100 / KCE  
 Location: Hanesville  
 Item/Number: 943-5427.400  
 Sample Type(s): Multi-phase  
 Water

## CHEMICAL ANALYSIS

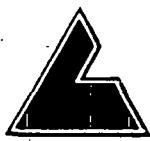
SAMPLE IDENTITY	DATE SAMPLED	REMARKS											
		10100											
W.W. 3	4/19/94 1994	1											

Total No. of Containers: 2

Issued by: John G. Boeniger Received by: John G. Boeniger  
 Organization: Golder Associates Organization: Golder Associates  
 Item: 142294 Time: 11:20

Issued by: _____	Received by: _____	Organization: _____
Date: _____	Date: _____	Time: _____
Issued by: _____	Received by: _____	Organization: _____
Date: _____	Date: _____	Time: _____
Match shipping bill, if any		
Very Method:		

## **Appendix IV**



June 19, 1996

Mr. Angel Diaz  
Brockway Standard, Inc.  
Highway 84 West  
Homerville, Georgia 31634

Subject: **Report of a Limited Sediment Sampling and Testing Program**  
NPDES Outfall #003  
Brockway Standard, Inc.  
Homerville, Clinch County, Georgia  
LAW Project Number 40544-6-7739

Dear Mr. Diaz:

Law Engineering and Environmental Services, Inc. (LAW) has completed a limited sediment sampling and testing program for the drainage ditch downgradient from NPDES Outfall #003 at the subject property. These services were performed in general accordance with LAW Proposal Number 96-4599E, dated May 10, 1996. Authorization for these services was provided by your Purchase Order #007379 dated May 21, 1996.

This report is intended for the use of Brockway Standard, Inc. only. Reliance on this document by any other party without the express written consent of LAW constitutes that party's acceptance of the attached Agreement for Secondary Client. Use of this report for purposes beyond those reasonably intended by Brockway Standard, Inc. and LAW will be at the sole risk of the user. Submittal of this report for regulatory agency review is included with the intended use of this report.

The conclusions contained herein are based on the data which was reviewed and documented in this report along with our experience on similar projects. If additional information concerning the environmental conditions at the drainage ditch downgradient from NPDES Outfall #003 is discovered it should be reported to us for our review so that we can reassess potential environmental impacts, if necessary.

#### **Background**

This sampling and testing program was performed at the request of the Georgia Department of Natural Resources, Environmental Protection Division (EPD) as stated in a letter addressed to Brockway Standard, Inc. dated April 17, 1996. EPD requested that Brockway Standard, Inc. perform a metal scan on representative sediment samples taken from the outfall #003 ditch and the stream considered to be waters of the State, and evaluate if contamination exists and the extent of migration of contamination. Based on this information and your response to our proposal, LAW performed a limited sediment sampling and testing program.

### Sediment Laboratory Analysis

The sediment samples obtained were analyzed by Law Engineering and Environmental Services National Laboratories (LENL) in Pensacola, Florida. The three sediment samples were analyzed in the laboratory by Inductively Coupled Argon Plasma (ICP) methodologies for 24 metals by SW-846 6010 procedures.

The analytes detected and the applicable regulatory limit/guidelines, where published, are summarized in Table 1 below. Table 1 also compares the results of the testing to the Notification Concentrations established by the Georgia Hazardous Sites Response Act. Complete laboratory analysis results and chain-of-custody records are attached to this report.

Table 1  
Results of Sediment Laboratory Analysis  
NPDES Outfall #003 Ditch  
Brockway Standard, Inc.  
Homerville, Georgia  
LAW Project No. 40544-6-7739  
Samples collected on May 29, 1996

Analyte	Units	S-1	S-2	S-3	HSRA NC <sup>1</sup>
Lead	mg/Kg	703	653	208	300
Antimony	mg/Kg	3.64	2.81	ND	10.00
Arsenic	mg/Kg	3.85	2.56	ND	41.00
Barium	mg/Kg	51.5	56.0	19.5	500.0
Beryllium	mg/Kg	ND	0.597	0.539	3.000
Cadmium	mg/Kg	5.72	3.5	1.71	39.00
Chromium	mg/Kg	112.0	92.1	32.6	1200.0
Cobalt	mg/Kg	ND	3.16	0.899	25.000
Copper	mg/Kg	41.7	130.0	363.0	1500.0
Nickel	mg/Kg	51.1	71.8	10.5	420.0
Selenium	mg/Kg	ND	ND	ND	36
Silver	mg/Kg	ND	ND	ND	10
Thallium	mg/Kg	ND	ND	ND	10

Brockway Standard, Inc.  
Limited Sediment Sampling and Testing Program  
LAW Project No. 40544-6-7739

June 19, 1996  
Page 4

Analyte	Units	S-1	S-2	S-3	HSRA NC <sup>1</sup>
Vanadium	mg/Kg	2.18	3.41	8.45	100.00
Zinc	mg/Kg	1330	1600	240	2800

- Notes: 1. HSRA NC = Hazardous Sites Response Act, Notification Concentration, Appendix I, Georgia Rule 391-3-19.  
2. ND = Not Detected at laboratory detection limit.

### Conclusions

Sediment laboratory analysis results did not indicate the presence of the analytes tested at concentrations above applicable Hazardous Sites Response Act Notification Concentrations except for lead in S-1 and S-2. Lead concentrations in the sediment in these areas likely exceed concentrations which may be attributable to ambient conditions. Based on this information elevated lead concentrations likely are present in the ditch sediment between sample locations S-1 and S-2.

We appreciate the opportunity to have assisted you in this matter. If you have any questions or wish to discuss our findings in further detail, please contact us.

Sincerely,

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

Darrell M. Setser  
Environmental Engineer

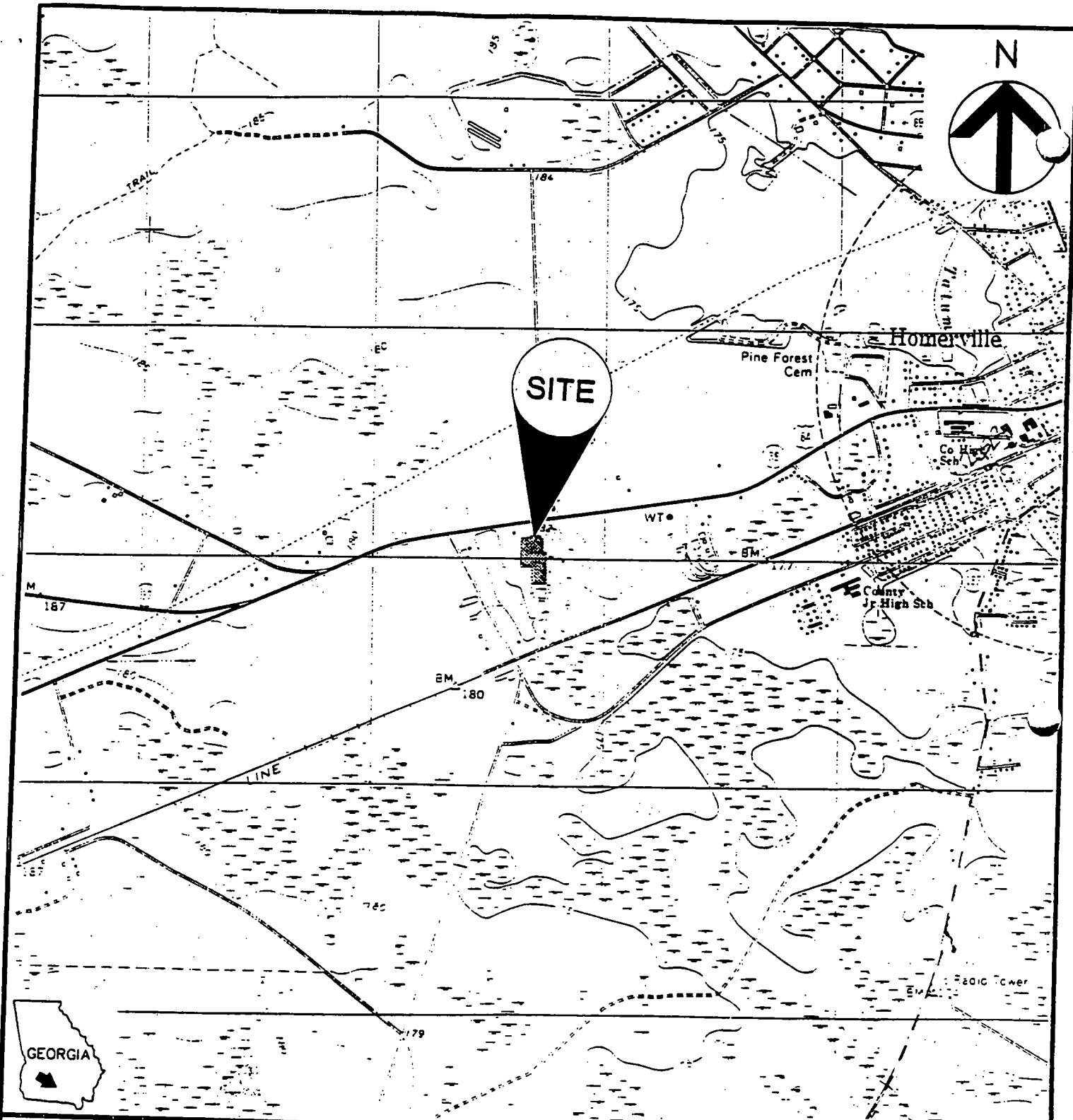
James A. Horton  
Principal Engineer  
Registered, Georgia #12385

DMS/JAH:ph

Attachments: Site Location Plan  
Field Exploration Plan  
Laboratory Analysis

Distribution: Brockway Standard, Inc. (2)  
File (1)

\phyllis\darrell\7739.rpt



REFERENCE: TOPOGRAPHIC MAP  
HOMERVILLE WEST QUADRANGLE; GEORGIA  
DATED: 1978  
U.S. GEOLOGICAL SURVEY

0 1000' 2000'

GRAPHIC SCALE

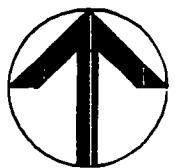


LAW ENGINEERING AND  
ENVIRONMENTAL SERVICES, INC.  
JACKSONVILLE, FLORIDA

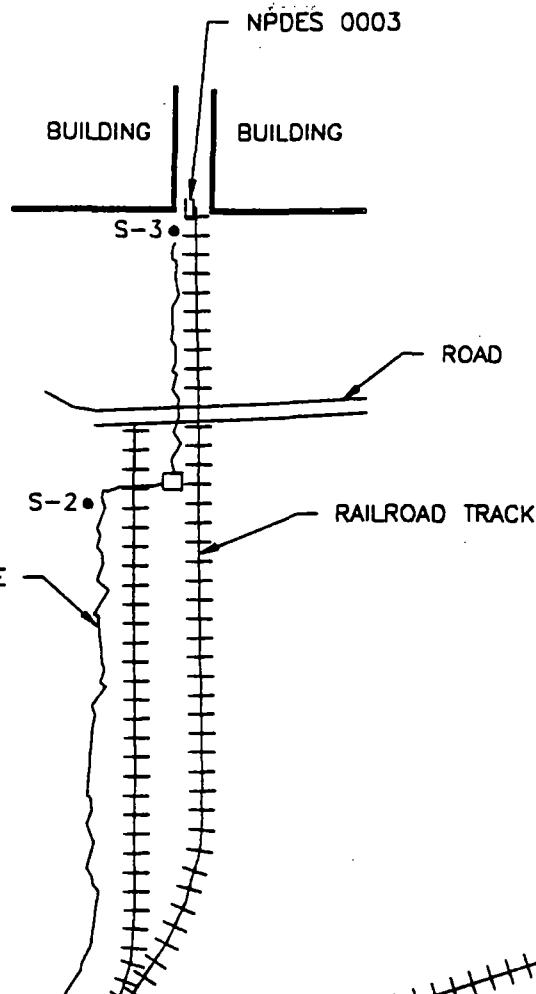
SITE LOCATION PLAN  
Brockway Standard, Inc.  
Highway 84 West  
Homerville, Georgia

DRAWN: TW	DATE: 6/11/96	SCALE: 1" = 2000'
CHECKED: DMS	PROJ. NO. 40544-6-7739	FIGURE 1

N



HIGHWAY 84



POND

DRAINAGE  
DITCH

RAILROAD TRACK

- LEGEND
- SEDIMENT SAMPLE LOCATION

REFERENCE: SITE SKETCH PREPARED BY LAW  
DATED: MAY 29, 1996



LAW ENGINEERING AND  
ENVIRONMENTAL SERVICES, INC.  
JACKSONVILLE, FLORIDA

FIELD EXPLORATION PLAN

Brockway Standard, Inc.  
Highway 84 West  
Homerville, Georgia

DRAWN: TW	DATE: 6/11/96	SCALE: N.T.S.
CHECKED: DMS	PROJ. NO. 40544-6-7739	FIGURE 2

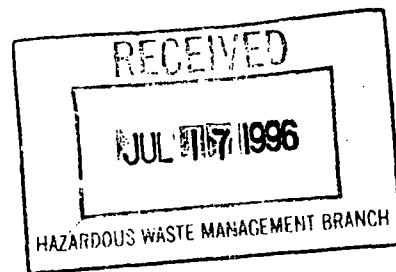
### **APPENDIX III**

## **Analytical Results for SI Samples**

From: Georgia Dept. of Natural Resources  
Environmental Protection Div. Laboratory  
455 14th Street NW  
Atlanta, GA 30318

July 17, 1996

To: E. Williams  
D. Heater  
HWMB



The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

**Sample I.D. AB19274** Source ID#: ADHOC  
DNR project: HW  
sample description: BROCKWAY STANDARD HW60100  
Sample Collector: WMS/HEATER  
Sample collection date: 06/11/96 Time: 10:15  
Lab submittal date: 06/12/96 Time: 09:59  
DNR Lab reference: HW60100 LABORATORY: METALS

Jose' Jones Well

Parameter	Result	Units	MDL
EPA Method 8260 Water	see below	ug/L	5
Semivolatile water sample (8270)	see below	ug/l	10
Extraction 3510 Semivol. L/L	950ml	ml	
Arsenic	01002	Not Detected	ug/l
Lead	01051	1.4	ug/l
Selenium	01147	Not Detected	ug/l
ICP METALS FOR HAZARDOUS WASTE	see below	ug/l	5

Data for EPA Method 8260 Water ug/L:

Component Name	Result	Component MDL
Dichlorodifluoromethane	34668 Not Detected	5
Chloromethane	34418 Not Detected	10
Bromomethane	34413 Not Detected	10
Vinyl Chloride	39175 Not Detected	10
Chloroethane	34311 Not Detected	10
Methylene Chloride	34423 Not Detected	5
Trichlorofluoromethane	34488 Not Detected	5
Acetone	81552 Not Detected	100
Dibromomethane	77596 Not Detected	5
trans-1,2-Dichloroethene	34546 Not Detected	5
Iodomethane	77424 Not Detected	5
Carbon Disulfide	77041 Not Detected	5
1,1-Dichloroethene	34501 Not Detected	5
1,1-Dichloroethane	34496 Not Detected	5
cis-1,2-Dichloroethene	77093 Not Detected	5
2,2-Dichloropropane	77170 Not Detected	5
Bromochloromethane	77297 Not Detected	5
Chloroform	32106 Not Detected	5

E. Williams Sample I.D. AB19274 (continued)  
Page: 2  
July 17, 1996

Data for EPA Method 8260 Water (continued):

Component Name	Result	Component MDL
Dibromofluoromethane (Surrogate QC Std.)	18.8	0
1,1-Dichloropropene	77168 Not Detected	5
1,2-Dichloroethane	32103 Not Detected	5
2-Butanone	81595 Not Detected	100
1,1,1-Trichloroethane	34506 Not Detected	5
Carbon Tetrachloride	32102 Not Detected	5
Vinyl Acetate	77057 Not Detected	50
Bromodichloromethane	32101 Not Detected	5
1,2-Dichloropropane	34541 Not Detected	5
Trichloroethene	39180 Not Detected	5
Benzene	34030 Not Detected	5
2-Chloroethyl vinyl ether	34576 Not Detected	5
cis-1,3-Dichloropropene	34704 Not Detected	5
trans-1,3-Dichloropropene	34699 Not Detected	5
Dibromochloromethane	32105 Not Detected	5
1,1,2-Trichloroethane	34511 Not Detected	5
Bromoform	32104 Not Detected	5
1,2,3-Trichloropropane	77443 Not Detected	5
4-Methyl-2-Pentanone	81596 Not Detected	50
2-Hexanone	77103 Not Detected	50
Tetrachloroethene	34475 Not Detected	5
1,3-Dichloropropane	77173 Not Detected	5
1,1,2,2-Tetrachloroethane	34516 Not Detected	5
Toluene-d8 (Surrogate QC Std.)	20.2	0
Toluene	34010 Not Detected	5
1,2-Dibromoethane	77651 Not Detected	5
Chlorobenzene	34301 Not Detected	5
Ethylbenzene	34371 Not Detected	5
1,1,1,2-Tetrachloroethane	77562 Not Detected	5
Bromofluorobenzene (Surrogate QC Std.)	19.0	0
Styrene	77128 Not Detected	5
p,m-Xylene	77135 Not Detected	5
o-Xylene	77135 Not Detected	5
Isopropylbenzene	77223 Not Detected	5
Bromobenzene	81555 Not Detected	5
n-Propylbenzene	77224 Not Detected	5
2-Chlorotoluene	77275 Not Detected	5
1,3,5-Trimethylbenzene	77226 Not Detected	5
4-Chlorotoluene	77277 Not Detected	5
tert-Butylbenzene	77353 Not Detected	5
1,2,4-Trimethylbenzene	77222 Not Detected	5
sec-Butylbenzene	77350 Not Detected	5
1,3-Dichlorobenzene	34566 Not Detected	5
p-Isopropyltoluene	77356 Not Detected	5
1,4-Dichlorobenzene	34571 Not Detected	5
n-Butylbenzene	77342 Not Detected	5
1,2-Dichlorobenzene	34536 Not Detected	5
1,2-Dibromo-3-chloropropane	38487 Not Detected	5
1,2,4-Trichlorobenzene	34551 Not Detected	5
Hexachlorobutadiene	38702 Not Detected	5
Naphthalene	34696 Not Detected	5

E. Williams Sample I.D. AB19274 (continued)  
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Data for EPA Method 8260 Water (continued):

Component Name	Result	Component MDL
1,2,3-Trichlorobenzene	77613 Not Detected	5

Data for Semivolatile water sample (8270) ug/l:

Component Name	Result	Component MDL
n-Nitrosodimethylamine	34438 Not Detected	10
2-Picoline	77088 Not Detected	10
Methylmethanesulfonate	73595 Not Detected	10
2-Fluorophenol (Surrogate QC Std.)	36.2	
Ethylmethanesulfonate	73571 Not Detected	20
Aniline	77089 Not Detected	10
Phenol-d5 (Surrogate QC Std.)	29.7	
Phenol	34694 Not Detected	10
bis(2-Chloroethyl)ether	34273 Not Detected	10
2-Chlorophenol	34586 Not Detected	10
1,3-Dichlorobenzene	34566 Not Detected	10
1,4-Dichlorobenzene	34571 Not Detected	10
Benzyl alcohol	77147 Not Detected	20
1,2-Dichlorobenzene	34536 Not Detected	10
2-Methylphenol	Not Detected	10
bis(2-Chloroisopropyl)ether	34283 Not Detected	10
Acetophenone	81553 Not Detected	10
4-Methylphenol	Not Detected	10
n-Nitroso-di-n-propylamine	34428 Not Detected	10
Hexachloroethane	34396 Not Detected	10
Nitrobenzene-d5 (Surrogate QC Std.)	76.8	
Nitrobenzene	34447 Not Detected	10
n-Nitrosopiperidine	73619 Not Detected	20
Isophorone	34408 Not Detected	10
2-Nitrophenol	34591 Not Detected	10
2,4-Dimethylphenol	34606 Not Detected	10
bis(2-Chloroethoxy)methane	34278 Not Detected	10
Benzoic acid	77247 Not Detected	50
2,4-Dichlorophenol	34601 Not Detected	10
1,2,4-Trichlorobenzene	34551 Not Detected	10
aa-dimethyl-Phenethylamine	73564 Not Detected	10
Naphthalene	34696 Not Detected	10
4-Chloroaniline	73529 Not Detected	20
2,6-Dichlorophenol	77541 Not Detected	10
Hexachlorobutadiene	38702 Not Detected	10
n-Nitroso-di-n-butylamine	73609 Not Detected	10
4-Chloro-3-methylphenol	34452 Not Detected	20
2-Methylnaphthalene	77416 Not Detected	10
1,2,4,5-Tetrachlorobenzene	77734 Not Detected	10
Hexachlorocyclopentadiene	34386 Not Detected	10
2,4,6-Trichlorophenol	34621 Not Detected	10
2,4,5-Trichlorophenol	77687 Not Detected	10
2-Fluorobiphenyl (Surrogate QC Std.)	90.8	
2-Chloronaphthalene	34581 Not Detected	10
1-Chloronaphthalene	Not Detected	10

Data for Semivolatile water sample (8270) (continued):

Component Name	Result	Component MDL
2-Nitroaniline	78142 Not Detected	50
Dimethylphthalate	34341 Not Detected	10
Acenaphthylene	34200 Not Detected	10
2,6-Dinitrotoluene	34626 Not Detected	10
3-Nitroaniline	78300 Not Detected	50
Acenaphthene	34205 Not Detected	10
2,4-Dinitrophenol	34616 Not Detected	50
4-Nitrophenol	34646 Not Detected	50
Dibenzofuran	81302 Not Detected	10
Pentachlorobenzene	77793 Not Detected	10
2,4-Dinitrotoluene	34611 Not Detected	10
1-Naphthylamine	73600 Not Detected	10
2-Naphthylamine	73601 Not Detected	10
2,3,4,6-Tetrachlorophenol	Not Detected	10
Diethylphthalate	34336 Not Detected	10
Fluorene	34381 Not Detected	10
4-Chlorophenyl-phenylether	34641 Not Detected	10
4-Nitroaniline	30342 Not Detected	20
Diphenylamine	Not Detected	10
4,6-Dinitro-2-methylphenol	34657 Not Detected	50
n-Nitrosodiphenylamine	34433 Not Detected	10
1,2-Diphenylhydrazine	34346 Not Detected	10
2,4,6-Tribromophenol (Surrogate QC Std.)	82.8	
4-Bromophenyl-phenylether	34636 Not Detected	10
Phenacetin	Not Detected	20
Hexachlorobenzene	39700 Not Detected	10
4-Aminobiphenyl	77581 Not Detected	20
Pentachlorophenol	39032 Not Detected	50
Pronamide	39080 Not Detected	10
Pentachloronitrobenzene	81316 Not Detected	20
Phenanthrene	34461 Not Detected	10
Anthracene	34220 Not Detected	10
Di-n-butylphthalate	39110 Not Detected	10
Fluoranthene	34376 Not Detected	10
Benzidine	39120 Not Detected	10
Pyrene	34469 Not Detected	10
Terphenyl-d14 (Surrogate QC Std.)	94.8	
p-Dimethylaminoazobenzene	73558 Not Detected	10
Butylbenzylphthalate	34292 Not Detected	10
Benzo[a]anthracene	34526 Not Detected	10
3,3'-Dichlorobenzidine	34631 Not Detected	20
Chrysene	34320 Not Detected	10
bis(2-Ethylhexyl)phthalate	39100 Not Detected	10
Di-n-octylphthalate	34596 Not Detected	10
Benzo[b]fluoranthene	34230 Not Detected	10
Benzo[k]fluoranthene	34242 Not Detected	10
7,12-Dimethylbenz(a)anthracene	73559 Not Detected	10
Benzo[a]pyrene	34247 Not Detected	10
3-Methylcholanthrene	73591 Not Detected	10
Dibenz(a,j)acridine	Not Detected	10
Indeno[1,2,3-cd]pyrene	34403 Not Detected	10

E. Williams Sample I.D. AB19274 (continued)  
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Data for Semivolatile water sample (8270) (continued):

Component Name	Result	Component MDL
Dibenz[a,h]anthracene	34556 Not Detected	10
Benzo[g,h,i]perylene	34521 Not Detected	10
Pyridine	77045 Not Detected	10
ALPHA BHC	39337 Not Detected	10
GAMMA BHC	39340 Not Detected	10
BETA BHC	39338 Not Detected	10
DELTA BHC	34259 Not Detected	10
HEPTACHLOR	39410 Not Detected	10
ALDRIN	39330 Not Detected	10
HEPTACHLOR EPOXIDE	39420 Not Detected	25
ENDOSULFAN 1	34361 Not Detected	50
DIELDRIN	39380 Not Detected	10
P, P' DDE	39320 Not Detected	10
ENDRIN	39390 Not Detected	20
ENDOSULFAN 2	34356 Not Detected	50
P, P' DDD	39310 Not Detected	10
ENDRIN ALDEHYDE	34366 Not Detected	10
ENDOSULFAN SULFATE	34351 Not Detected	25
P, P' DDT	39300 Not Detected	10
3,4,5-Trichlorophenol	10 TIE**	

\*\*Tentatively Identified/Estimated Value \*\*

Data for ICP METALS FOR HAZARDOUS WASTE ug/l:

Component Name	Result	Component MDL
Silver	01077 Not Detected	30
Barium	01007 27	10
Cadmium	01027 Not Detected	5
Chromium	01034 Not Detected	20
Nickel	01067 Not Detected	20

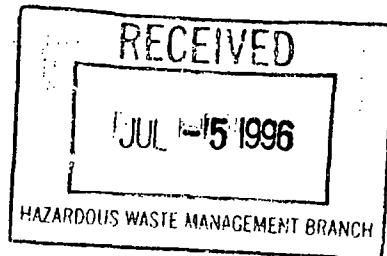
If there are any questions regarding this data, please call.

SUPERVISOR

From: Georgia Dept. of Natural Resources  
Environmental Protection Div. Laboratory  
455 14th Street NW  
Atlanta, GA 30318

July 3, 1996

To: E. Williams  
D. Heater  
HWMB



The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

**Sample I.D. AB19269** Source ID#: ADHOC  
DNR project: HW  
sample description: BROCKWAY STANDARD HW60101  
Sample Collector: WMS/HEATER  
Sample collection date: 06/11/96 Time: 11:45  
Lab submittal date: 06/12/96 Time: 09:59  
DNR Lab reference: HW60101 LABORATORY: METALS

Parameter	Result	Units	MDL
EPA Method 8260 Water	see below	ug/L	5
Semivolatile water sample (8270)	see below	ug/l	10
Extraction 3510 SemiVol. L/L	990ml	ml	
ICP METALS FOR HAZARDOUS WASTE	see below	ug/l	

Data for EPA Method 8260 Water ug/L:

Component Name	Result	Component MDL
Dichlorodifluoromethane	34668 Not Detected	5
Chloromethane	34418 Not Detected	10
Bromomethane	34413 Not Detected	10
Vinyl Chloride	39175 Not Detected	10
Chloroethane	34311 Not Detected	10
Methylene Chloride	34423 Not Detected	5
Trichlorofluoromethane	34488 Not Detected	5
Acetone	81552 Not Detected	100
Dibromomethane	77596 Not Detected	5
trans-1,2-Dichloroethene	34546 Not Detected	5
Iodomethane	77424 Not Detected	5
Carbon Disulfide	77041 Not Detected	5
1,1-Dichloroethene	34501 Not Detected	5
1,1-Dichloroethane	34496 Not Detected	5
cis-1,2-Dichloroethene	77093 Not Detected	5
2,2-Dichloropropane	77170 Not Detected	5
Bromochloromethane	77297 Not Detected	5
Chloroform	32106 Not Detected	5
Dibromofluoromethane (Surrogate QC Std.)	18.5	0
1,1-Dichloropropene	77168 Not Detected	5
1,2-Dichloroethane	32103 Not Detected	5

E. Williams Sample I.D. AB19269 (continued)  
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Data for EPA Method 8260 Water (continued) :

Component Name	Result	Component MDL
2-Butanone	81595 Not Detected	100
1,1,1-Trichloroethane	34506 Not Detected	5
Carbon Tetrachloride	32102 Not Detected	5
Vinyl Acetate	77057 Not Detected	50
Bromodichloromethane	32101 Not Detected	5
1,2-Dichloropropane	34541 Not Detected	5
Trichloroethene	39180 Not Detected	5
Benzene	34030 Not Detected	5
2-Chloroethyl vinyl ether	34576 Not Detected	5
cis-1,3-Dichloropropene	34704 Not Detected	5
trans-1,3-Dichloropropene	34699 Not Detected	5
Dibromoethane	32105 Not Detected	5
1,1,2-Trichloroethane	34511 Not Detected	5
Bromoform	32104 Not Detected	5
1,2,3-Trichloropropane	77443 Not Detected	5
4-Methyl-2-Pentanone	81596 Not Detected	50
2-Hexanone	77103 Not Detected	50
Tetrachloroethene	34475 Not Detected	5
1,3-Dichloropropane	77173 Not Detected	5
1,1,2,2-Tetrachloroethane	34516 Not Detected	5
Toluene-d8 (Surrogate QC Std.)	20.4	0
Toluene	34010 Not Detected	5
1,2-Dibromoethane	77651 Not Detected	5
Chlorobenzene	34301 Not Detected	5
Ethylbenzene	34371 Not Detected	5
1,1,1,2-Tetrachloroethane	77562 Not Detected	5
Bromofluorobenzene (Surrogate QC Std.)	19.4	0
Styrene	77128 Not Detected	5
p,m-Xylene	77135 Not Detected	5
o-Xylene	77135 Not Detected	5
Isopropylbenzene	77223 Not Detected	5
Bromobenzene	81555 Not Detected	5
n-Propylbenzene	77224 Not Detected	5
2-Chlorotoluene	77275 Not Detected	5
1,3,5-Trimethylbenzene	77226 Not Detected	5
4-Chlorotoluene	77277 Not Detected	5
tert-Butylbenzene	77353 Not Detected	5
1,2,4-Trimethylbenzene	77222 Not Detected	5
sec-Butylbenzene	77350 Not Detected	5
1,3-Dichlorobenzene	34566 Not Detected	5
p-Isopropyltoluene	77356 Not Detected	5
1,4-Dichlorobenzene	34571 Not Detected	5
n-Butylbenzene	77342 Not Detected	5
1,2-Dichlorobenzene	34536 Not Detected	5
1,2-Dibromo-3-chloropropane	38487 Not Detected	5
1,2,4-Trichlorobenzene	34551 Not Detected	5
Hexachlorobutadiene	38702 Not Detected	5
Naphthalene	34696 Not Detected	5
1,2,3-Trichlorobenzene	77613 Not Detected	5

E. Williams Sample I.D. AB19269 (continued)  
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Data for Semivolatile water sample (8270) ug/l:

Component Name	Result	Component MDL
n-Nitrosodimethylamine	34438 Not Detected	10
2-Picoline	77088 Not Detected	10
Methylmethanesulfonate	73595 Not Detected	10
<b>2-Fluorophenol (Surrogate QC Std.)</b>	<b>Not Analyzed</b>	
Ethylmethanesulfonate	73571 Not Detected	20
Aniline	77089 Not Detected	10
<b>Phenol-d5 (Surrogate QC Std.)</b>	<b>Not Analyzed</b>	
Phenol	34694 Not Analyzed	10
bis(2-Chloroethyl)ether	34273 Not Detected	10
2-Chlorophenol	34586 Not Analyzed	10
1,3-Dichlorobenzene	34566 Not Detected	10
1,4-Dichlorobenzene	34571 Not Analyzed	10
Benzyl alcohol	77147 Not Detected	20
1,2-Dichlorobenzene	34536 Not Detected	10
2-Methylphenol	Not Detected	10
bis(2-Chloroisopropyl)ether	34283 Not Detected	10
Acetophenone	81553 Not Detected	10
4-Methylphenol	Not Detected	10
n-Nitroso-di-n-propylamine	34428 Not Analyzed	10
Hexachloroethane	34396 Not Detected	10
<b>Nitrobenzene-d5 (Surrogate QC Std.)</b>	<b>Not Analyzed</b>	
Nitrobenzene	34447 Not Detected	10
n-Nitrosopiperidine	73619 Not Detected	20
Isophorone	34408 Not Detected	10
2-Nitrophenol	34591 Not Detected	10
2,4-Dimethylphenol	34606 Not Detected	10
bis(2-Chloroethoxy)methane	34278 Not Detected	10
Benzoic acid	77247 Not Detected	50
2,4-Dichlorophenol	34601 Not Detected	10
1,2,4-Trichlorobenzene	34551 Not Analyzed	10
aa-dimethyl-Phenethylamine	73564 Not Detected	10
Naphthalene	34696 Not Detected	10
4-Chloroaniline	73529 Not Detected	20
2,6-Dichlorophenol	77541 Not Detected	10
Hexachlorobutadiene	38702 Not Detected	10
n-Nitroso-di-n-butylamine	73609 Not Detected	10
4-Chloro-3-methylphenol	34452 Not Analyzed	20
2-Methylnaphthalene	77416 Not Detected	10
1,2,4,5-Tetrachlorobenzene	77734 Not Detected	10
Hexachlorocyclopentadiene	34386 Not Detected	10
2,4,6-Trichlorophenol	34621 Not Detected	10
2,4,5-Trichlorophenol	77687 Not Detected	10
<b>2-Fluorobiphenyl (Surrogate QC Std.)</b>	<b>Not Analyzed</b>	
2-Chloronaphthalene	34581 Not Detected	10
1-Chloronaphthalene	Not Detected	10
2-Nitroaniline	78142 Not Detected	50
Dimethylphthalate	34341 Not Detected	10
Acenaphthylene	34200 Not Detected	10
2,6-Dinitrotoluene	34626 Not Detected	10
3-Nitroaniline	78300 Not Detected	50
Acenaphthene	34205 Not Analyzed	10

E. Williams Sample I.D. AB19269 (continued)  
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Data for Semivolatile water sample (8270) (continued):

Component Name	Result	Component MDL
2,4-Dinitrophenol	34616 Not Detected	50
4-Nitrophenol	34646 Not Analyzed	50
Dibenzofuran	81302 Not Detected	10
Pentachlorobenzene	77793 Not Detected	10
2,4-Dinitrotoluene	34611 Not Analyzed	10
1-Naphthylamine	73600 Not Detected	10
2-Naphthylamine	73601 Not Detected	10
2,3,4,6-Tetrachlorophenol	Not Detected	10
Diethylphthalate	34336 Not Detected	10
Fluorene	34381 Not Detected	10
4-Chlorophenyl-phenylether	34641 Not Detected	10
4-Nitroaniline	30342 Not Detected	20
Diphenylamine	Not Detected	10
4,6-Dinitro-2-methylphenol	34657 Not Detected	50
n-Nitrosodiphenylamine	34433 Not Detected	10
1,2-Diphenylhydrazine	34346 Not Detected	10
<b>2,4,6-Tribromophenol (Surrogate QC Std.)</b>	<b>Not Analyzed</b>	
4-Bromophenyl-phenylether	34636 Not Detected	10
Phenacetin	Not Detected	20
Hexachlorobenzene	39700 Not Detected	10
4-Aminobiphenyl	77581 Not Detected	20
Pentachlorophenol	39032 Not Analyzed	50
Pronamide	39080 Not Detected	10
Pentachloronitrobenzene	81316 Not Detected	20
Phenanthrene	34461 Not Detected	10
Anthracene	34220 Not Detected	10
Di-n-butylphthalate	39110 Not Detected	10
Fluoranthene	34376 Not Detected	10
Benzidine	39120 Not Detected	10
Pyrene	34469 Not Analyzed	10
<b>Terphenyl-d14 (Surrogate QC Std.)</b>	<b>Not Analyzed</b>	
p-Dimethylaminoazobenzene	73558 Not Detected	10
Butylbenzylphthalate	34292 Not Detected	10
Benzo[a]anthracene	34526 Not Detected	10
3,3'-Dichlorobenzidine	34631 Not Detected	20
Chrysene	34320 Not Detected	10
bis(2-Ethylhexyl)phthalate	39100 Not Detected	10
Di-n-octylphthalate	34596 Not Detected	10
Benzo[b]fluoranthene	34230 Not Detected	10
Benzo[k]fluoranthene	34242 Not Detected	10
7,12-Dimethylbenz(a)anthracene	73559 Not Detected	10
Benzo[a]pyrene	34247 Not Detected	10
3-Methylcholanthrene	73591 Not Detected	10
Dibenz(a,j)acridine	Not Detected	10
Indeno[1,2,3-cd]pyrene	34403 Not Detected	10
Dibenz[a,h]anthracene	34556 Not Detected	10
Benzo[g,h,i]perylene	34521 Not Detected	10
Pyridine	77045 Not Detected	10
ALPHA BHC	39337 Not Detected	10
GAMMA BHC	39340 Not Detected	10
BETA BHC	39338 Not Detected	10

E. Williams Sample I.D. AB19269 (continued)  
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Data for Semivolatile water sample (8270) (continued):

Component Name	Result	Component MDL
DELTA BHC	34259 Not Detected	10
HEPTACHLOR	39410 Not Detected	10
ALDRIN	39330 Not Detected	10
HEPTACHLOR EPOXIDE	39420 Not Detected	25
ENDOSULFAN 1	34361 Not Detected	50
DIELDRIN	39380 Not Detected	10
P,P' DDE	39320 Not Detected	10
ENDRIN	39390 Not Detected	20
ENDOSULFAN 2	34356 Not Detected	50
P,P' DDD	39310 Not Detected	10
ENDRIN ALDEHYDE	34366 Not Detected	10
ENDOSULFAN SULFATE	34351 Not Detected	25
P,P' DDT	39300 Not Detected	10

Data for ICP METALS FOR HAZARDOUS WASTE ug/l:

Component Name	Result	Component MDL
Silver	01077 Not Detected	30
Arsenic	01002 Not Detected	30
Barium	01007 27	10
Cadmium	01027 Not Detected	5
Chromium	01034 27	20
Nickel	01067 Not Detected	20
Lead	01051 140	50
Selenium	01147 Not Detected	50

Summary of specification violations or warnings:

Analyte: 2-Fluorophenol (Surrogate QC Std.)  
Target value: 100 Result: Not Analyzed

Analyte: Phenol-d5 (Surrogate QC Std.)  
Target value: 100 Result: Not Analyzed

Analyte: Nitrobenzene-d5 (Surrogate QC Std.)  
Target value: 100 Result: Not Analyzed

Analyte: 2-Fluorobiphenyl (Surrogate QC Std.)  
Target value: 100 Result: Not Analyzed

Analyte: 2,4,6-Tribromophenol (Surrogate QC Std.)  
Target value: 100 Result: Not Analyzed

Analyte: Terphenyl-d14 (Surrogate QC Std.)  
Target value: 100 Result: Not Analyzed

E. Williams Sample I.D. AB19269 (continued)  
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Sample comments:

SW-1. Surface water sample in wetlands area.  
Bottle for the pesticide analysis was accidentally broken in the lab.

Method 8270 analysis - Surrogates and Matrix spike compounds are reported as "Not Analyzed" due to a laboratory mistake made during the sample extraction procedure.

If there are any questions regarding this data, please call.

SUPERVISOR

From: Georgia Dept. of Natural Resources  
Environmental Protection Div. Laboratory  
455 14th Street NW  
Atlanta, GA 30318

July 17, 1996

To: E. Williams  
D. Heater  
HWMB

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

**Sample I.D. AB19276** Source ID#: ADHOC  
DNR project: HW  
sample description: BROCKWAY STANDARD HW60102 (sed 1, wetlands)  
Sample Collector: WMS/HEATER  
Sample collection date: 06/11/96 Time: 12:00  
Lab submittal date: 06/12/96 Time: 09:59  
DNR Lab reference: HW60102 LABORATORY: METALS

Parameter	Result	Units	MDL
EPA Method 8260 Soil	see below	ug/kg	5
Semivolatile Soil/Sed (8270)	see below	ug/kg	660
ICP METALS FOR HW SOLIDS	see below	mg/kg	

Data for EPA Method 8260 Soil ug/kg:

Component Name	Result	Component MDL
Dichlorodifluoromethane	34334 Not Detected	5
Chloromethane	34421 Not Detected	10
Bromomethane	34416 Not Detected	10
Vinyl Chloride	34495 Not Detected	10
Chloroethane	34314 Not Detected	10
Methylene Chloride	34426 Not Detected	5
Trichlorofluoromethane	34491 Not Detected	5
Acetone	75059 Not Detected	100
Dibromomethane	78756 Not Detected	5
trans-1,2-Dichloroethene	34549 Not Detected	5
Iodomethane	73121 Not Detected	5
Carbon Disulfide	78544 Not Detected	5
1,1-Dichloroethene	34504 Not Detected	5
1,1-Dichloroethane	34499 Not Detected	5
cis-1,2-Dichloroethene	77093 Not Detected	5
2,2-Dichloropropane	77170 Not Detected	5
Bromoform	77297 Not Detected	5
Chloroform	34318 Not Detected	5
Dibromofluoromethane (Surrogate QC Std.)	17.9	
1,1-Dichloropropene	77168 Not Detected	5
1,2-Dichloroethane	34534 Not Detected	5
2-Butanone	75078 Not Detected	100

E. Williams Sample I.D. AB19276 (continued)  
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Data for EPA Method 8260 Soil (continued):

Component Name	Result	Component MDL
1,1,1-Trichloroethane	34509 Not Detected	5
Carbon Tetrachloride	34299 Not Detected	5
Vinyl Acetate	78498 Not Detected	50
Bromodichloromethane	34330 Not Detected	5
1,2-Dichloropropane	34544 Not Detected	5
Trichloroethene	34487 Not Detected	5
Benzene	34237 Not Detected	5
2-Chloroethyl vinyl ether	34579 Not Detected	5
cis-1,3-Dichloropropene	34702 Not Detected	5
trans-1,3-Dichloropropene	34697 Not Detected	5
Dibromochloromethane	34309 Not Detected	5
1,1,2-Trichloroethane	34514 Not Detected	5
Bromoform	34290 Not Detected	5
1,2,3-Trichloropropane	78490 Not Detected	5
4-Methyl-2-Pentanone	75169 Not Detected	50
2-Hexanone	75166 Not Detected	50
Tetrachloroethene	34478 Not Detected	5
1,3-Dichloropropane	77173 Not Detected	5
1,1,2,2-Tetrachloroethane	34519 Not Detected	5
Toluene-d8 (Surrogate QC Std.)	22.4	
Toluene	34483 Trace*	5
1,2-Dibromoethane	79749 Not Detected	5
Chlorobenzene	34304 Not Detected	5
Ethylbenzene	34374 Not Detected	5
1,1,1,2-Tetrachloroethane	Not Detected	5
Bromofluorobenzene (Surrogate QC Std.)	15.8	
Styrene	75192 Not Detected	5
p,m-Xylene	45510 Trace*	5
o-Xylene	78362 Not Detected	5
Isopropylbenzene	77223 Not Detected	5
Bromobenzene	78491 Not Detected	5
n-Propylbenzene	77224 Trace*	5
2-Chlorotoluene	77225 Not Detected	5
1,3,5-Trimethylbenzene	77226 Not Detected	5
4-Chlorotoluene	77277 Not Detected	5
tert-Butylbenzene	77353 Not Detected	5
1,2,4-Trimethylbenzene	34554 22.7	5
sec-Butylbenzene	77350 Not Detected	5
1,3-Dichlorobenzene	34569 Not Detected	5
p-Isopropyltoluene	77356 Not Detected	5
1,4-Dichlorobenzene	34574 Not Detected	5
n-Butylbenzene	77342 Not Detected	5
1,2-Dichlorobenzene	34539 Not Detected	5
1,2-Dibromo-3-chloropropane	Not Detected	5
1,2,4-Trichlorobenzene	34554 Not Detected	5
Hexachlorobutadiene	39705 Not Detected	5
Naphthalene	34445 Trace*	5
1,2,3-Trichlorobenzene	77613 Not Detected	5
Total Hydrocarbon Fractions	158 TIE**	
*Less than quantitation limits	*	
**Tentatively identified/estimated value	**	

Data for Semivolatile Soil/Sed (8270) ug/kg:

Component Name	Result	Component MDL
n-Nitrosodimethylamine	34441 Not Detected	660
2-Picoline	73310 Not Detected	660
Methylmethanesulfonate	73119 Not Detected	660
<b>2-Fluorophenol (Surrogate QC Std.)</b>	<b>1.4</b>	
Ethylmethanesulfonate	73118 Not Detected	660
Aniline	73185 Not Detected	660
<b>Phenol-d5 (Surrogate QC Std.)</b>	<b>11.3</b>	
Phenol	34695 Not Detected	660
bis(2-Chloroethyl)ether	34276 Not Detected	660
2-Chlorophenol	34589 Not Detected	660
1,3-Dichlorobenzene	34569 Not Detected	660
1,4-Dichlorobenzene	34574 Not Detected	660
Benzyl alcohol	75212 Not Detected	1300
1,2-Dichlorobenzene	34539 Not Detected	660
2-Methylphenol	Not Detected	660
bis(2-Chloroisopropyl)ether	34286 Not Detected	660
Acetophenone	73272 Not Detected	660
4-Methylphenol	Not Detected	660
n-Nitroso-di-n-propylamine	34428 Not Detected	660
Hexachloroethane	34399 Not Detected	660
Nitrobenzene-d5 (Surrogate QC Std.)	44.3	
Nitrobenzene	34450 Not Detected	660
n-Nitrosopiperidine	73129 Not Detected	660
Isophorone	34411 Not Detected	660
2-Nitrophenol	34594 Not Detected	660
2,4-Dimethylphenol	34609 Not Detected	660
bis(2-Chloroethoxy)methane	34281 Not Detected	660
Benzoic acid	75315 Not Detected	3300
2,4-Dichlorophenol	34604 Not Detected	660
1,2,4-Trichlorobenzene	34554 Not Detected	660
aa-dimethyl-Phenethylamine	73136 Not Detected	660
Naphthalene	34445 Not Detected	660
4-Chloroaniline	78867 Not Detected	1300
2,6-Dichlorophenol	73122 Not Detected	660
Hexachlorobutadiene	38705 Not Detected	660
n-Nitroso-di-n-butylamine	73159 Not Detected	660
4-Chloro-3-methylphenol	34455 Not Detected	1300
2-Methylnaphthalene	78868 Not Detected	660
1,2,4,5-Tetrachlorobenzene	79787 Not Detected	660
Hexachlorocyclopentadiene	34389 Not Detected	660
2,4,6-Trichlorophenol	34624 Not Detected	660
2,4,5-Trichlorophenol	78401 Not Detected	660
2-Fluorobiphenyl (Surrogate QC Std.)	42.1	
2-Chloronaphthalene	34584 Not Detected	660
1-Chloronaphthalene	Not Detected	660
2-Nitroaniline	78299 Not Detected	3300
Dimethylphthalate	34344 Not Detected	660
Acenaphthylene	34203 Not Detected	660
2,6-Dinitrotoluene	34629 Not Detected	660
3-Nitroaniline	78869 Not Detected	3300
Acenaphthene	34208 Not Detected	660

Data for Semivolatile Soil/Sed (8270) (continued):

Component Name	Result	Component MDL
2,4-Dinitrophenol	34619 Not Detected	3300
4-Nitrophenol	34649 Not Detected	3300
Dibenzofuran	75647 Not Detected	660
Pentachlorobenzene	79790 Not Detected	660
2,4-Dinitrotoluene	34614 Not Detected	660
1-Naphthylamine	73143 Not Detected	660
2-Naphthylamine	73124 Not Detected	660
2,3,4,6-Tetrachlorophenol	Not Detected	660
Diethylphthalate	34339 Not Detected	660
Fluorene	34384 Not Detected	660
4-Chlorophenyl-phenylether	34644 Not Detected	660
4-Nitroaniline	78870 Not Detected	660
Diphenylamine	Not Detected	660
4,6-Dinitro-2-methylphenol	34660 Not Detected	3300
n-Nitrosodiphenylamine	34436 Not Detected	660
1,2-Diphenylhydrazine	34349 Not Detected	660
2,4,6-Tribromophenol (Surrogate QC Std.)	1.8	
4-Bromophenyl-phenylether	34639 Not Detected	660
Phenacetin	73117 Not Detected	660
Hexachlorobenzene	39701 Not Detected	660
4-Aminobiphenyl	73125 Not Detected	660
Pentachlorophenol	39061 Not Detected	3300
Pronamide	73031 Not Detected	660
Pentachloronitrobenzene	81808 Not Detected	660
Phenanthrene	34464 Not Detected	660
Anthracene	34223 Not Detected	660
Di-n-butylphthalate	39112 Not Detected	660
Fluoranthene	34379 Not Detected	660
Benzidine	39121 Not Detected	660
Pyrene	34472 Not Detected	660
Terphenyl-d14 (Surrogate QC Std.)	49.9	
p-Dimethylaminoazobenzene	73116 Not Detected	660
Butylbenzylphthalate	34295 Not Detected	660
Benzo[a]anthracene	34529 Not Detected	660
3,3'-Dichlorobenzidine	34634 Not Detected	1300
Chrysene	34323 Not Detected	660
bis(2-Ethylhexyl)phthalate	39102 Not Detected	660
Di-n-octylphthalate	34599 Not Detected	660
Benzo[b]fluoranthene	34233 Not Detected	660
Benzo[k]fluoranthene	34245 Not Detected	660
7,12-Dimethylbenz(a)anthracene	73115 Not Detected	660
Benzo[a]pyrene	34250 Not Detected	660
3-Methylcholanthrene	73156 Not Detected	660
Dibenz(a,j)acridine	Not Detected	660
Indeno[1,2,3-cd]pyrene	34406 Not Detected	660
Dibenz[a,h]anthracene	34559 Not Detected	660
Benzo[g,h,i]perylene	34524 Not Detected	660
Pyridine	73312 Not Detected	660
ALPHA BHC	39076 Not Detected	660
GAMMA BHC	39343 Not Detected	660
BETA BHC	34257 Not Detected	660

E. Williams Sample I.D. AB19276 (continued)  
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July 17, 1996

Data for Semivolatile Soil/Sed (8270) (continued):

Component Name	Result	Component MDL
DELTA BHC	34262 Not Detected	660
HEPTACHLOR	39413 Not Detected	660
ALDRIN	39333 Not Detected	660
HEPTACHLOR EPOXIDE	39423 Not Detected	1650
ENDOSULFAN 1	34364 Not Detected	3300
DIELDRIN	39383 Not Detected	660
P, P' DDE	39321 Not Detected	660
ENDRIN	39393 Not Detected	1320
ENDOSULFAN 2	34359 Not Detected	3300
P, P' DDD	39311 Not Detected	660
ENDRIN ALDEHYDE	34369 Not Detected	660
ENDOSULFAN SULFATE	34354 Not Detected	1650
P, P' DDT	39301 Not Detected	660

Data for ICP METALS FOR HW SOLIDS mg/kg:

Component Name	Result	Component MDL
Silver	01078 Not Detected	3
Arsenic	01003 Not Detected	3
Barium	01008 260	1
Cadmium	01028 22	1
Chromium	01029 730	2
Lead	01052 3200 <sup>000</sup>	5
Nickel	01068 140	2
Selenium	01148 5.6	5

Summary of specification violations or warnings:

Analyte: 2-Fluorophenol (Surrogate QC Std.)  
Lower specification value: 25                            Result: 1.4

Analyte: Phenol-d5 (Surrogate QC Std.)  
Lower specification value: 24                            Result: 11.3

Analyte: 2,4,6-Tribromophenol (Surrogate QC Std.)  
Lower specification value: 19                            Result: 1.8

If there are any questions regarding this data, please call.

SUPERVISOR

From: Georgia Dept. of Natural Resources  
Environmental Protection Div. Laboratory  
455 14th Street NW  
Atlanta, GA 30318

RECEIVED

JUL 1-5 1996

HAZARDOUS WASTE MANAGEMENT

July 3, 1996

To: E. Williams  
D. Heater  
HWMB

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

**Sample I.D. AB19278** Source ID#: ADHOC  
DNR project: HW  
sample description: BROCKWAY STANDARD HW60103  
Sample Collector: WMS/HEATER  
Sample collection date: 06/11/96 Time: 12:45  
Lab submittal date: 06/12/96 Time: 09:59  
DNR Lab reference: HW60103 LABORATORY: METALS

Parameter	Result	Units	MDL
EPA Method 8260 Water	see below	ug/L	5
Semivolatile water sample (8270)	see below	ug/l	10
Extraction 3510 SemiVol. L/L	990ml	ml	
ICP METALS FOR HAZARDOUS WASTE	see below	ug/l	

Data for EPA Method 8260 Water ug/L:

Component Name	Result	Component MDL
Dichlorodifluoromethane	34668 Not Detected	5
Chloromethane	34418 Not Detected	10
Bromomethane	34413 Not Detected	10
Vinyl Chloride	39175 Not Detected	10
Chloroethane	34311 Not Detected	10
Methylene Chloride	34423 Not Detected	5
Trichlorofluoromethane	34488 Not Detected	5
Acetone	81552 Not Detected	100
Dibromomethane	77596 Not Detected	5
trans-1,2-Dichloroethene	34546 Not Detected	5
Iodomethane	77424 Not Detected	5
Carbon Disulfide	77041 Not Detected	5
1,1-Dichloroethene	34501 Not Detected	5
1,1-Dichloroethane	34496 Not Detected	5
cis-1,2-Dichloroethene	77093 Not Detected	5
2,2-Dichloropropane	77170 Not Detected	5
Bromochloromethane	77297 Not Detected	5
Chloroform	32106 Not Detected	5
Dibromofluoromethane (Surrogate QC Std.)	18.5	0
1,1-Dichloropropene	77168 Not Detected	5
1,2-Dichloroethane	32103 Not Detected	5

Data for EPA Method 8260 Water (continued):

Component Name	Result	Component MDL
2-Butanone	81595 Not Detected	100
1,1,1-Trichloroethane	34506 Not Detected	5
Carbon Tetrachloride	32102 Not Detected	5
Vinyl Acetate	77057 Not Detected	50
Bromodichloromethane	32101 Not Detected	5
1,2-Dichloropropane	34541 Not Detected	5
Trichloroethene	39180 Not Detected	5
Benzene	34030 Not Detected	5
2-Chloroethyl vinyl ether	34576 Not Detected	5
cis-1,3-Dichloropropene	34704 Not Detected	5
trans-1,3-Dichloropropene	34699 Not Detected	5
Dibromochloromethane	32105 Not Detected	5
1,1,2-Trichloroethane	34511 Not Detected	5
Bromoform	32104 Not Detected	5
1,2,3-Trichloropropane	77443 Not Detected	5
4-Methyl-2-Pentanone	81596 Not Detected	50
2-Hexanone	77103 Not Detected	50
Tetrachloroethene	34475 Not Detected	5
1,3-Dichloropropane	77173 Not Detected	5
1,1,2,2-Tetrachloroethane	34516 Not Detected	5
Toluene-d8 (Surrogate QC Std.)	20.7	0
Toluene	34010 Not Detected	5
1,2-Dibromoethane	77651 Not Detected	5
Chlorobenzene	34301 Not Detected	5
Ethylbenzene	34371 Not Detected	5
1,1,1,2-Tetrachloroethane	77562 Not Detected	5
Bromofluorobenzene (Surrogate QC Std.)	19.6	0
Styrene	77128 Not Detected	5
p,m-Xylene	77135 Not Detected	5
o-Xylene	77135 Not Detected	5
Isopropylbenzene	77223 Not Detected	5
Bromobenzene	81555 Not Detected	5
n-Propylbenzene	77224 Not Detected	5
2-Chlorotoluene	77275 Not Detected	5
1,3,5-Trimethylbenzene	77226 Not Detected	5
4-Chlorotoluene	77277 Not Detected	5
tert-Butylbenzene	77353 Not Detected	5
1,2,4-Trimethylbenzene	77222 Not Detected	5
sec-Butylbenzene	77350 Not Detected	5
1,3-Dichlorobenzene	34566 Not Detected	5
p-Isopropyltoluene	77356 Not Detected	5
1,4-Dichlorobenzene	34571 Not Detected	5
n-Butylbenzene	77342 Not Detected	5
1,2-Dichlorobenzene	34536 Not Detected	5
1,2-Dibromo-3-chloropropane	38487 Not Detected	5
1,2,4-Trichlorobenzene	34551 Not Detected	5
Hexachlorobutadiene	38702 Not Detected	5
Naphthalene	34696 Not Detected	5
1,2,3-Trichlorobenzene	77613 Not Detected	5

Data for Semivolatile water sample (8270) ug/l:

Component Name	Result	Component MDL
n-Nitrosodimethylamine	34438 Not Detected	10
2-Picoline	77088 Not Detected	10
Methylmethanesulfonate	73595 Not Detected	10
2-Fluorophenol (Surrogate QC Std.)	36.4	
Ethylmethanesulfonate	73571 Not Detected	20
Aniline	77089 Not Detected	10
Phenol-d5 (Surrogate QC Std.)	32.9	
Phenol	34694 Not Detected	10
bis(2-Chloroethyl)ether	34273 Not Detected	10
2-Chlorophenol	34586 Not Detected	10
1,3-Dichlorobenzene	34566 Not Detected	10
1,4-Dichlorobenzene	34571 Not Detected	10
Benzyl alcohol	77147 Not Detected	20
1,2-Dichlorobenzene	34536 Not Detected	10
2-Methylphenol	Not Detected	10
bis(2-Chloroisopropyl)ether	34283 Not Detected	10
Acetophenone	81553 Not Detected	10
4-Methylphenol	Not Detected	10
n-Nitroso-di-n-propylamine	34428 Not Detected	10
Hexachloroethane	34396 Not Detected	10
Nitrobenzene-d5 (Surrogate QC Std.)	90.2	
Nitrobenzene	34447 Not Detected	10
n-Nitrosopiperidine	73619 Not Detected	20
Isophorone	34408 Not Detected	10
2-Nitrophenol	34591 Not Detected	10
2,4-Dimethylphenol	34606 Not Detected	10
bis(2-Chloroethoxy)methane	34278 Not Detected	10
Benzoic acid	77247 Not Detected	50
2,4-Dichlorophenol	34601 Not Detected	10
1,2,4-Trichlorobenzene	34551 Not Detected	10
aa-dimethyl-Phenethylamine	73564 Not Detected	10
Naphthalene	34696 Not Detected	10
4-Chloroaniline	73529 Not Detected	20
2,6-Dichlorophenol	77541 Not Detected	10
Hexachlorobutadiene	38702 Not Detected	10
n-Nitroso-di-n-butylamine	73609 Not Detected	10
4-Chloro-3-methylphenol	34452 Not Detected	20
2-Methylnaphthalene	77416 Not Detected	10
1,2,4,5-Tetrachlorobenzene	77734 Not Detected	10
Hexachlorocyclopentadiene	34386 Not Detected	10
2,4,6-Trichlorophenol	34621 Not Detected	10
2,4,5-Trichlorophenol	77687 Not Detected	10
2-Fluorobiphenyl (Surrogate QC Std.)	89.5	
2-Chloronaphthalene	34581 Not Detected	10
1-Chloronaphthalene	Not Detected	10
2-Nitroaniline	78142 Not Detected	50
Dimethylphthalate	34341 Not Detected	10
Acenaphthylene	34200 Not Detected	10
2,6-Dinitrotoluene	34626 Not Detected	10
3-Nitroaniline	78300 Not Detected	50
Acenaphthene	34205 Not Detected	10

Data for Semivolatile water sample (8270) (continued):

Component Name	Result	Component MDL
2,4-Dinitrophenol	34616 Not Detected	50
4-Nitrophenol	34646 Not Detected	50
Dibenzofuran	81302 Not Detected	10
Pentachlorobenzene	77793 Not Detected	10
2,4-Dinitrotoluene	34611 Not Detected	10
1-Naphthylamine	73600 Not Detected	10
2-Naphthylamine	73601 Not Detected	10
2,3,4,6-Tetrachlorophenol	Not Detected	10
Diethylphthalate	34336 Not Detected	10
Fluorene	34381 Not Detected	10
4-Chlorophenyl-phenylether	34641 Not Detected	10
4-Nitroaniline	30342 Not Detected	20
Diphenylamine	Not Detected	10
4,6-Dinitro-2-methylphenol	34657 Not Detected	50
n-Nitrosodiphenylamine	34433 Not Detected	10
1,2-Diphenylhydrazine	34346 Not Detected	10
2,4,6-Tribromophenol (Surrogate QC Std.)	70.7	
4-Bromophenyl-phenylether	34636 Not Detected	10
Phenacetin	Not Detected	20
Hexachlorobenzene	39700 Not Detected	10
4-Aminobiphenyl	77581 Not Detected	20
Pentachlorophenol	39032 Not Detected	50
Pronamide	39080 Not Detected	10
Pentachloronitrobenzene	81316 Not Detected	20
Phenanthrene	34461 Not Detected	10
Anthracene	34220 Not Detected	10
Di-n-butylphthalate	39110 Not Detected	10
Fluoranthene	34376 Not Detected	10
Benzidine	39120 Not Detected	10
Pyrene	34469 Not Detected	10
Terphenyl-d14 (Surrogate QC Std.)	87.6	
p-Dimethylaminoazobenzene	73558 Not Detected	10
Butylbenzylphthalate	34292 Not Detected	10
Benzo[a]anthracene	34526 Not Detected	10
3,3'-Dichlorobenzidene	34631 Not Detected	20
Chrysene	34320 Not Detected	10
bis(2-Ethylhexyl)phthalate	39100 Not Detected	10
Di-n-octylphthalate	34596 Not Detected	10
Benzo[b]fluoranthene	34230 Not Detected	10
Benzo[k]fluoranthene	34242 Not Detected	10
7,12-Dimethylbenz(a)anthracene	73559 Not Detected	10
Benzo[a]pyrene	34247 Not Detected	10
3-Methylcholanthrene	73591 Not Detected	10
Dibenz(a,j)acridine	Not Detected	10
Indeno[1,2,3-cd]pyrene	34403 Not Detected	10
Dibenz[a,h]anthracene	34556 Not Detected	10
Benzo[g,h,i]perylene	34521 Not Detected	10
Pyridine	77045 Not Detected	10
ALPHA BHC	39337 Not Detected	10
GAMMA BHC	39340 Not Detected	10
BETA BHC	39338 Not Detected	10

E. Williams Sample I.D. AB19278 (continued)  
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July 3, 1996

Bkg  
SW-2

Data for Semivolatile water sample (8270) (continued):

Component Name	Result	Component MDL
DELTA BHC	34259 Not Detected	10
HEPTACHLOR	39410 Not Detected	10
ALDRIN	39330 Not Detected	10
HEPTACHLOR EPOXIDE	39420 Not Detected	25
ENDOSULFAN 1	34361 Not Detected	50
DIELDRIN	39380 Not Detected	10
P, P' DDE	39320 Not Detected	10
ENDRIN	39390 Not Detected	20
ENDOSULFAN 2	34356 Not Detected	50
P, P' DDD	39310 Not Detected	10
ENDRIN ALDEHYDE	34366 Not Detected	10
ENDOSULFAN SULFATE	34351 Not Detected	25
P, P' DDT	39300 Not Detected	10

Data for ICP METALS FOR HAZARDOUS WASTE ug/l:

Component Name	Result	Component MDL
Silver	01077 Not Detected	30
Arsenic	01002 Not Detected	30
Barium	01007 15	10
Cadmium	01027 Not Detected	5
Chromium	01034 Not Detected	20
Nickel	01067 Not Detected	20
Lead	01051 Not Detected	50
Selenium	01147 Not Detected	50

Sample comments:

SW-2. Surface water sample upgradient wetlands area, background sample.

If there are any questions regarding this data, please call.

SUPERVISOR

From: Georgia Dept. of Natural Resources  
Environmental Protection Div. Laboratory  
455 14th Street NW  
Atlanta, GA 30318

July 17, 1996

To: E. Williams  
D. Heater  
HWMB

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

**Sample I.D. AB19280** Source ID#: ADHOC  
DNR project: HW  
sample description: BROCKWAY STANDARD HW60104 (Sed 2, Background)  
Sample Collector: WMS/HEATER  
Sample collection date: 06/11/96 Time: 13:00  
Lab submittal date: 06/12/96 Time: 09:59  
DNR Lab reference: HW60104 LABORATORY: METALS

Parameter	Result	Units	MDL
EPA Method 8260 Soil	see below	ug/kg	5
Semivolatile Soil/Sed (8270)	see below	ug/kg	660
ICP METALS FOR HW SOLIDS	see below	mg/kg	

Data for EPA Method 8260 Soil ug/kg:

Component Name	Result	Component MDL
Dichlorodifluoromethane	34334 Not Detected	5
Chloromethane	34421 Not Detected	10
Bromomethane	34416 Not Detected	10
Vinyl Chloride	34495 Not Detected	10
Chloroethane	34314 Not Detected	10
Methylene Chloride	34426 Not Detected	5
Trichlorofluoromethane	34491 Not Detected	5
Acetone	75059 Not Detected	100
Dibromomethane	78756 Not Detected	5
trans-1,2-Dichloroethene	34549 Not Detected	5
Iodomethane	73121 Not Detected	5
Carbon Disulfide	78544 Not Detected	5
1,1-Dichloroethene	34504 Not Detected	5
1,1-Dichloroethane	34499 Not Detected	5
cis-1,2-Dichloroethene	77093 Not Detected	5
2,2-Dichloropropane	77170 Not Detected	5
Bromochloromethane	77297 Not Detected	5
Chloroform	34318 Not Detected	5
Dibromofluoromethane (Surrogate QC Std.)	17.8	0
1,1-Dichloropropene	77168 Not Detected	5
1,2-Dichloroethane	34534 Not Detected	5
2-Butanone	75078 Not Detected	100

Data for EPA Method 8260 Soil (continued) :

Component Name	Result	Component MDL
1,1,1-Trichloroethane	34509 Not Detected	5
Carbon Tetrachloride	34299 Not Detected	5
Vinyl Acetate	78498 Not Detected	50
Bromodichloromethane	34330 Not Detected	5
1,2-Dichloropropane	34544 Not Detected	5
Trichloroethene	34487 Not Detected	5
Benzene	34237 Not Detected	5
2-Chloroethyl vinyl ether	34579 Not Detected	5
cis-1,3-Dichloropropene	34702 Not Detected	5
trans-1,3-Dichloropropene	34697 Not Detected	5
Dibromochloromethane	34309 Not Detected	5
1,1,2-Trichloroethane	34514 Not Detected	5
Bromoform	34290 Not Detected	5
1,2,3-Trichloropropane	78490 Not Detected	5
4-Methyl-2-Pentanone	75169 Not Detected	50
2-Hexanone	75166 Not Detected	50
Tetrachloroethene	34478 Not Detected	5
1,3-Dichloropropane	77173 Not Detected	5
1,1,2,2-Tetrachloroethane	34519 Not Detected	5
Toluene-d8 (Surrogate QC Std.)	20.7	0
Toluene	34483 Not Detected	5
1,2-Dibromoethane	79749 Not Detected	5
Chlorobenzene	34304 Not Detected	5
Ethylbenzene	34374 Not Detected	5
1,1,1,2-Tetrachloroethane	Not Detected	5
Bromofluorobenzene (Surrogate QC Std.)	17.0	0
Styrene	75192 Not Detected	5
p,m-Xylene	45510 Not Detected	5
o-Xylene	78362 Not Detected	5
Isopropylbenzene	77223 Not Detected	5
Bromobenzene	78491 Not Detected	5
n-Propylbenzene	77224 Not Detected	5
2-Chlorotoluene	77225 Not Detected	5
1,3,5-Trimethylbenzene	77226 Not Detected	5
4-Chlorotoluene	77277 Not Detected	5
tert-Butylbenzene	77353 Not Detected	5
1,2,4-Trimethylbenzene	34554 Not Detected	5
sec-Butylbenzene	77350 Not Detected	5
1,3-Dichlorobenzene	34569 Not Detected	5
p-Isopropyltoluene	77356 Not Detected	5
1,4-Dichlorobenzene	34574 Not Detected	5
n-Butylbenzene	77342 Not Detected	5
1,2-Dichlorobenzene	34539 Not Detected	5
1,2-Dibromo-3-chloropropane	Not Detected	5
1,2,4-Trichlorobenzene	34554 Not Detected	5
Hexachlorobutadiene	39705 Not Detected	5
Naphthalene	34445 Not Detected	5
1,2,3-Trichlorobenzene	77613 Not Detected	5

E. Williams Sample I.D. AB19280 (continued)  
Page: 3  
July 17, 1996

Data for Semivolatile Soil/Sed (8270) ug/kg:

Component Name	Result	Component MDL
n-Nitrosodimethylamine	34441 Not Detected	660
2-Picoline	73310 Not Detected	660
Methylmethanesulfonate	73119 Not Detected	660
<b>2-Fluorophenol (Surrogate QC Std.)</b>	<b>16.6</b>	
Ethylmethanesulfonate	73118 Not Detected	660
Aniline	73185 Not Detected	660
Phenol-d5 (Surrogate QC Std.)	32.4	
Phenol	34695 Not Detected	660
bis(2-Chloroethyl)ether	34276 Not Detected	660
2-Chlorophenol	34589 Not Detected	660
1,3-Dichlorobenzene	34569 Not Detected	660
1,4-Dichlorobenzene	34574 Not Detected	660
Benzyl alcohol	75212 Not Detected	1300
1,2-Dichlorobenzene	34539 Not Detected	660
2-Methylphenol	Not Detected	660
bis(2-Chloroisopropyl)ether	34286 Not Detected	660
Acetophenone	73272 Not Detected	660
4-Methylphenol	Not Detected	660
n-Nitroso-di-n-propylamine	34428 Not Detected	660
Hexachloroethane	34399 Not Detected	660
Nitrobenzene-d5 (Surrogate QC Std.)	38.4	
Nitrobenzene	34450 Not Detected	660
n-Nitrosopiperidine	73129 Not Detected	660
Isophorone	34411 Not Detected	660
2-Nitrophenol	34594 Not Detected	660
2,4-Dimethylphenol	34609 Not Detected	660
bis(2-Chloroethoxy)methane	34281 Not Detected	660
Benzoic acid	75315 Not Detected	3300
2,4-Dichlorophenol	34604 Not Detected	660
1,2,4-Trichlorobenzene	34554 Not Detected	660
aa-dimethyl-Phenethylamine	73136 Not Detected	660
Naphthalene	34445 Not Detected	660
4-Chloroaniline	78867 Not Detected	1300
2,6-Dichlorophenol	73122 Not Detected	660
Hexachlorobutadiene	38705 Not Detected	660
n-Nitroso-di-n-butylamine	73159 Not Detected	660
4-Chloro-3-methylphenol	34455 Not Detected	1300
2-Methylnaphthalene	78868 Not Detected	660
1,2,4,5-Tetrachlorobenzene	79787 Not Detected	660
Hexachlorocyclopentadiene	34389 Not Detected	660
2,4,6-Trichlorophenol	34624 Not Detected	660
2,4,5-Trichlorophenol	78401 Not Detected	660
2-Fluorobiphenyl (Surrogate QC Std.)	50.5	
2-Chloronaphthalene	34584 Not Detected	660
1-Chloronaphthalene	Not Detected	660
2-Nitroaniline	78299 Not Detected	3300
Dimethylphthalate	34344 Not Detected	660
Acenaphthylene	34203 Not Detected	660
2,6-Dinitrotoluene	34629 Not Detected	660
3-Nitroaniline	78869 Not Detected	3300
Acenaphthene	34208 Not Detected	660

Data for Semivolatile Soil/Sed (8270) (continued):

Component Name	Result	Component MDL
2,4-Dinitrophenol	34619 Not Detected	3300
4-Nitrophenol	34649 Not Detected	3300
Dibenzofuran	75647 Not Detected	660
Pentachlorobenzene	79790 Not Detected	660
2,4-Dinitrotoluene	34614 Not Detected	660
1-Naphthylamine	73143 Not Detected	660
2-Naphthylamine	73124 Not Detected	660
2,3,4,6-Tetrachlorophenol	Not Detected	660
Diethylphthalate	34339 Not Detected	660
Fluorene	34384 Not Detected	660
4-Chlorophenyl-phenylether	34644 Not Detected	660
4-Nitroaniline	78870 Not Detected	660
Diphenylamine	Not Detected	660
4,6-Dinitro-2-methylphenol	34660 Not Detected	3300
n-Nitrosodiphenylamine	34436 Not Detected	660
1,2-Diphenylhydrazine	34349 Not Detected	660
2,4,6-Tribromophenol (Surrogate QC Std.)	41.5	
4-Bromophenyl-phenylether	34639 Not Detected	660
Phenacetin	73117 Not Detected	660
Hexachlorobenzene	39701 Not Detected	660
4-Aminobiphenyl	73125 Not Detected	660
Pentachlorophenol	39061 Not Detected	3300
Pronamide	73031 Not Detected	660
Pentachloronitrobenzene	81808 Not Detected	660
Phenanthrone	34464 Not Detected	660
Anthracene	34223 Not Detected	660
Di-n-butylphthalate	39112 Not Detected	660
Fluoranthene	34379 Not Detected	660
Benzidine	39121 Not Detected	660
Pyrene	34472 Not Detected	660
Terphenyl-d14 (Surrogate QC Std.)	67.8	
p-Dimethylaminoazobenzene	73116 Not Detected	660
Butylbenzylphthalate	34295 Not Detected	660
Benzo[a]anthracene	34529 Not Detected	660
3,3'-Dichlorobenzidine	34634 Not Detected	1300
Chrysene	34323 Not Detected	660
bis(2-Ethylhexyl)phthalate	39102 Not Detected	660
Di-n-octylphthalate	34599 Not Detected	660
Benzo[b]fluoranthene	34233 Not Detected	660
Benzo[k]fluoranthene	34245 Not Detected	660
7,12-Dimethylbenz(a)anthracene	73115 Not Detected	660
Benzo[a]pyrene	34250 Not Detected	660
3-Methylcholanthrene	73156 Not Detected	660
Dibenz(a,j)acridine	Not Detected	660
Indeno[1,2,3-cd]pyrene	34406 Not Detected	660
Dibenz[a,h]anthracene	34559 Not Detected	660
Benzo[g,h,i]perylene	34524 Not Detected	660
Pyridine	73312 Not Detected	660
ALPHA BHC	39076 Not Detected	660
GAMMA BHC	39343 Not Detected	660
BETA BHC	34257 Not Detected	660

E. Williams Sample I.D. AB19280 (continued)  
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July 17, 1996

Data for Semivolatile Soil/Sed (8270) (continued):

Component Name	Result	Component MDL
DELTA BHC	34262 Not Detected	660
HEPTACHLOR	39413 Not Detected	660
ALDRIN	39333 Not Detected	660
HEPTACHLOR EPOXIDE	39423 Not Detected	1650
ENDOSULFAN 1	34364 Not Detected	3300
DIELDRIN	39383 Not Detected	660
P, P' DDE	39321 Not Detected	660
ENDRIN	39393 Not Detected	1320
ENDOSULFAN 2	34359 Not Detected	3300
P, P' DDD	39311 Not Detected	660
ENDRIN ALDEHYDE	34369 Not Detected	660
ENDOSULFAN SULFATE	34354 Not Detected	1650
P, P' DDT	39301 Not Detected	660

Data for ICP METALS FOR HW SOLIDS mg/kg:

Component Name	Result	Component MDL
Silver	01078 Not Detected	3
Arsenic	01003 Not Detected	3
Barium	01008 9.0	1
Cadmium	01028 Not Detected	1
Chromium	01029 12	2
Lead	01052 5.2	5
Nickel	01068 3.5	2
Selenium	01148 Not Detected	5

Summary of specification violations or warnings:

Analyte: 2-Fluorophenol (Surrogate QC Std.)  
Lower specification value: 25                      Result: 16.6

If there are any questions regarding this data, please call.

SUPERVISOR

From: Georgia Dept. of Natural Resources  
Environmental Protection Div. Laboratory  
455 14th Street NW  
Atlanta, GA 30318

RECEIVED

JUN 24 1996

HAZARDOUS WASTE MANAGEMENT BRANCH

June 21, 1996

To: E. Williams  
D. Heater  
HWMB

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

**Sample I.D. AB19281**

Source ID#: ADHOC

DNR project: HW

sample description: BROCKWAY STANDARD HW60105

Sample Collector: WMS./HEATER

Sample collection date: 06/11/96

Lab submittal date: 06/12/96

Time: 09:59

DNR Lab reference: HW60105

LABORATORY: METALS

<b>Parameter</b>	<b>Result</b>	<b>Units</b>	<b>MDL</b>
EPA Method 8260 Water	see below	ug/L	5

Data for EPA Method 8260 Water ug/L:

<b>Component Name</b>	<b>Result</b>	<b>Component MDL</b>
Dichlorodifluoromethane	34668 Not Detected	5
Chloromethane	34418 Not Detected	10
Bromomethane	34413 Not Detected	10
Vinyl Chloride	39175 Not Detected	10
Chloroethane	34311 Not Detected	10
Methylene Chloride	34423 Not Detected	5
Trichlorofluoromethane	34488 Not Detected	5
Acetone	81552 Not Detected	100
Dibromomethane	77596 Not Detected	5
trans-1,2-Dichloroethene	34546 Not Detected	5
Iodomethane	77424 Not Detected	5
Carbon Disulfide	77041 Not Detected	5
1,1-Dichloroethene	34501 Not Detected	5
1,1-Dichloroethane	34496 Not Detected	5
cis-1,2-Dichloroethene	77093 Not Detected	5
2,2-Dichloropropane	77170 Not Detected	5
Bromochloromethane	77297 Not Detected	5
Chloroform	32106 Not Detected	5
Dibromofluoromethane (Surrogate QC Std.)	17.5	0
1,1-Dichloropropene	77168 Not Detected	5
1,2-Dichloroethane	32103 Not Detected	5
2-Butanone	81595 Not Detected	100
1,1,1-Trichloroethane	34506 Not Detected	5
Carbon Tetrachloride	32102 Not Detected	5
Vinyl Acetate	77057 Not Detected	50

E. Williams Sample I.D. AB19281 (continued)  
Page: 2  
June 21, 1996

Data for EPA Method 8260 Water (continued):

Component Name	Result	Component MDL
Bromodichloromethane	32101 Not Detected	5
1,2-Dichloropropane	34541 Not Detected	5
Trichloroethene	39180 Not Detected	5
Benzene	34030 Not Detected	5
2-Chloroethyl vinyl ether	34576 Not Detected	5
cis-1,3-Dichloropropene	34704 Not Detected	5
trans-1,3-Dichloropropene	34699 Not Detected	5
Dibromochloromethane	32105 Not Detected	5
1,1,2-Trichloroethane	34511 Not Detected	5
Bromoform	32104 Not Detected	5
1,2,3-Trichloropropane	77443 Not Detected	5
4-Methyl-2-Pentanone	81596 Not Detected	50
2-Hexanone	77103 Not Detected	50
Tetrachloroethene	34475 Not Detected	5
1,3-Dichloropropane	77173 Not Detected	5
1,1,2,2-Tetrachloroethane	34516 Not Detected	5
Toluene-d8 (Surrogate QC Std.)	20.9	0
Toluene	34010 Not Detected	5
1,2-Dibromoethane	77651 Not Detected	5
Chlorobenzene	34301 Not Detected	5
Ethylbenzene	34371 Not Detected	5
1,1,1,2-Tetrachloroethane	77562 Not Detected	5
Bromofluorobenzene (Surrogate QC Std.)	18.3	0
Styrene	77128 Not Detected	5
p,m-Xylene	77135 Not Detected	5
o-Xylene	77135 Not Detected	5
Isopropylbenzene	77223 Not Detected	5
Bromobenzene	81555 Not Detected	5
n-Propylbenzene	77224 Not Detected	5
2-Chlorotoluene	77275 Not Detected	5
1,3,5-Trimethylbenzene	77226 Not Detected	5
4-Chlorotoluene	77277 Not Detected	5
tert-Butylbenzene	77353 Not Detected	5
1,2,4-Trimethylbenzene	77222 Not Detected	5
sec-Butylbenzene	77350 Not Detected	5
1,3-Dichlorobenzene	34566 Not Detected	5
p-Isopropyltoluene	77356 Not Detected	5
1,4-Dichlorobenzene	34571 Not Detected	5
n-Butylbenzene	77342 Not Detected	5
1,2-Dichlorobenzene	34536 Not Detected	5
1,2-Dibromo-3-chloropropane	38487 Not Detected	5
1,2,4-Trichlorobenzene	34551 Not Detected	5
Hexachlorobutadiene	38702 Not Detected	5
Naphthalene	34696 Not Detected	5
1,2,3-Trichlorobenzene	77613 Not Detected	5

Sample comments:

Trip blank.

E. Williams Sample I.D. AB19281 (continued)  
Page: 3  
June 21, 1996

If there are any questions regarding this data, please call.

SUPERVISOR

Laboratory Report for Municipal Wells

**ENVIRONMENTAL PROTECTION DIVISION  
455 14th Street, Atlanta, Georgia 30318-7900**

**LABORATORY REPORT**

TO: <b>Mr. William Vest City of Homer 200 W Dame Avenue Homerville, GA 31634</b>		Date Collected: 04/12/95
		Time Collected: 13:20
		Sample Collector: K. SMITH
		Chlorination: Source: Ground
		Sample Type: Routine
		Received By: JLJ
		Date Received: 04/13/95
		Time Received: 11:41
		DW Project: VOC
		Reporting Date: 04/18/95
Sample ID : AA63037	DRINKING WATER PROGRAM	
Facility Name: Homerville		
Water System ID : 0650000		
Entry Point ID: 303		
Entry Point Descr.: #3 WELL		

ANALYTE	PARAMETER CODE	EPA NOTE	METHOD	RESULT	UNITS	MDL	ANALYSIS		
							ANALYST	DATE	MCL
<input type="checkbox"/> EPA 502.2 VOC DRINKING WATER									
1,1,1-Tetrachloroethane	77562	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
1,1,1-Trichloroethane	34506	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	200.00	
1,1,2,2-Tetrachloroethane	34516	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
1,1,2-Trichloroethane	34511	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00	
1,1-Dichloroethane	34496	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
1,1-Dichloroethylene	34501	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	7.00	
1,1-Dichloropropene	77168	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
1,2,3-Trichlorobenzene	77613	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
1,2,3-Trichloropropane	77443	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
1,2,4-Trichlorobenzene	34551	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	70.00	
1,2,4-Trimethylbenzene	77222	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
1,2-Dibromo-3-Chloropropane	38760	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	0.20	
1,2-Dibromoethane	81522	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	0.05	
1,2-Dichloroethane	32103	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00	
1,2-Dichloropropane	34541	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00	
1,3,5-Trimethylbenzene	77226	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
1,3-Dichloropropane	77173	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
2,2 -Dichloropropane	77170	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
Benzene	34030	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00	
Bromobenzene	81555	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
Bromo-chloromethane	77297	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		
Bromodichloromethane	32101	EPA 502.2	0.52	ug/L	0.50	JDA	04/14/95		
Bromoform	32104	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95		

Sample ID : AA63037

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYST	ANALYSIS	
								DATE	MCL
Bromomethane	34413		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Carbon tetrachloride	32102		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Chlorobenzene	34301		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	100.00
Chlorodibromomethane	34306		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Chloroethane	34311		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Chloroform	32106		EPA 502.2	2.44	ug/L	0.50	JDA	04/14/95	
Chloromethane	34418		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Dibromomethane	77596		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Dichlorodifluoromethane	34668		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Dichloromethane	34423		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Ethylbenzene	34371		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	700.00
Fluorotrichloromethane	34488		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Hexachlorobutadiene	38702		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Isopropylbenzene	77223		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Naphthalene	34696		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Styrene	77128		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	100.00
Tetrachloroethylene	34475		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Toluene	34010		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	1000.00
Total Xylene	34020		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	10000.00
Trichloroethylene	39180		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Vinyl Chloride	39175		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	2.00
cis-1,2-Dichloroethylene	77093		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	70.00
cis-1,3-Dichloropropene	34704		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
m-Chlorobenzene	34566		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
n-Butylbenzene	77342		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
n-Propylbenzene	77224		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
o-Chlorotoluene	77275		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
o-Dichlorobenzene	34536		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	600.00
p-Chlorotoluene	77277		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
p-Dichlorobenzene	34571		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	75.00
p-Isopropyltoluene	77356		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
sec-Butylbenzene	77350		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
tert-Butylbenzene	77353		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
trans-1,2-Dichloroethylene	34546		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	100.00
trans-1,3-Dichloropropene	34699		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	

### RESULTS ACCEPTABLE

ug/l : micrograms/liter  
 mg/l : milligrams/liter  
 mg/kg: milligrams/kilogram  
 ug/kg: micrograms/kilogram  
 ug: micrograms/gram

< : less than  
 MCL: Maximum Contaminant Level  
 MDL: Method Detection Limit  
 LSPC: result less than lower specification  
 USPC: result greater than upper specification

Danny Reed  
 Laboratory Manager (404)853-7962

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION  
455 14th Street, Atlanta, Georgia 30318-7900**

**LABORATORY REPORT**

TO: <i>Mr. William Vest City of Homer 200 W Dame Avenue Homerville, GA 31634</i>	Date Collected: 04/12/95
	Time Collected: 13:00
	Sample Collector: K. SMITH
	Chlorination: Source: Ground
	Sample Type: Routine
Sample ID : AA63039	Received By: JLJ
Facility Name: Homerville	Date Received: 04/13/95
Water System ID : 0650000	Time Received: 11:41
Entry Point ID: 302	DW Project: VOC
Entry Point Descr.: #2 WELL	Reporting Date: 04/19/95

ANALYTE	PARAMETER CODE	EPA NOTE	METHOD	RESULT	UNITS	MDL	ANALYSIS	
							ANALYST	DATE
<b>EPA 502.2 VOC DRINKING WATER</b>								
1,1,1,2-Tetrachloroethane	77562	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,1,1-Trichloroethane	34506	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	200.00
1,1,2,2-Tetrachloroethane	34516	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,1,2-Trichloroethane	34511	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	5.00
1,1-Dichloroethane	34496	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,1-Dichloroethylene	34501	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,1-Dichloropropene	77168	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,2,3-Trichlorobenzene	77613	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,2,3-Trichloropropane	77443	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,2,4-Trichlorobenzene	34551	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	70.00
1,2,4-Trimethylbenzene	77222	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,2-Dibromo-3-Chloropropane	38760	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	0.20
1,2-Dibromoethane	81522	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	0.05
1,2-Dichloroethane	32103	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	5.00
1,2-Dichloropropane	34541	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	5.00
1,3,5-Trimethylbenzene	77226	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
1,3-Dichloropropane	77173	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
2,2 -Dichloropropane	77170	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Benzene	34030	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	5.00
Bromobenzene	81555	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Bromoform	77297	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Bromodichloromethane	32101	EPA 502.2	6.02	ug/L	0.50	JDA	04/17/95	
Bromoform	32104	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYST	ANALYSIS DATE	MCL
Bromomethane	34413		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Carbon tetrachloride	32102		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	5.00
Ci: benzene	34301		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	100.00
Chlorodibromomethane	34306		EPA 502.2	1.66	ug/L	0.50	JDA	04/17/95	
Chloroethane	34311		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Chloroform	32106		EPA 502.2	23.49	ug/L	0.50	JDA	04/17/95	
Chloromethane	34418		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Dibromomethane	77596		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Dichlorodifluoromethane	34668		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Dichloromethane	34423		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	5.00
Ethylbenzene	34371		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	700.00
Fluorotrichloromethane	34488		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Hexachlorobutadiene	38702		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Isopropylbenzene	77223		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Naphthalene	34696		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
Styrene	77128		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	100.00
Tetrachloroethylene	34475		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	5.00
Toluene	34010		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	1000.00
Total Xylene	34020		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	10000.00
Trichloroethylene	39180		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	5.00
Vinyl Chloride	39175		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	2.00
cis-1,2-Dichloroethylene	77093		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	70.00
ci: 3-Dichloropropene	34704		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
m-Dichlorobenzene	34566		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
n-Butylbenzene	77342		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
n-Propylbenzene	77224		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
o-Chlorotoluene	77275		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
o-Dichlorobenzene	34536		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	600.00
p-Chlorotoluene	77277		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
p-Dichlorobenzene	34571		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	75.00
p-Isopropyltoluene	77356		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
sec-Butylbenzene	77350		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
tert-Butylbenzene	77353		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	
trans-1,2-Dichloroethylene	34546		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	100.00
trans-1,3-Dichloropropene	34699		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/17/95	

## RESULTS ACCEPTABLE

ug/l: micrograms/liter  
 mg/l: milligrams/liter  
 mg/kg: milligrams/kilogram  
 μg/kg: micrograms/kilogram  
 ug: micrograms/gram

< : less than  
 MCL: Maximum Contaminant Level  
 MDL: Method Detection Limit  
 LSPC: result less than lower specification  
 USPC: result greater than upper specification

Danny Reed  
 Laboratory Manager (404)853-7962

**ENVIRONMENTAL PROTECTION DIVISION  
455 14th Street, Atlanta, Georgia 30318-7900**

**LABORATORY REPORT**

<b>TO:</b> Mr. William Vest City of Homer 200 W Dame Avenue Homerville, GA 31634	<b>Date Collected:</b> 04/12/95 <b>Time Collected:</b> 13:40 <b>Sample Collector:</b> K. SMITH <b>Chlorination:</b> Source: Ground <b>Sample Type:</b> Routine <b>Received By:</b> JLJ <b>Date Received:</b> 04/13/95 <b>Time Received:</b> 11:41 <b>DW Project:</b> VOC <b>Reporting Date:</b> 04/18/95
<b>Sample ID :</b> AA63035 <b>Facility Name:</b> Homerville <b>Water System ID :</b> 0650000 <b>Entry Point ID:</b> 301 <b>Entry Point Descr.:</b> #1 WELL	77.2.1.1595 Drinking Water Program

ANALYTE	PARAMETER CODE	EPA METHOD	RESULT	UNITS	MDL	ANALYSIS		
						NOTE	ANALYST	DATE
<input type="checkbox"/> EPA 502.2 VOC DRINKING WATER								
1,1,1,2-Tetrachloroethane	77562	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
1,1,1-Trichloroethane	34506	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	200.00
1,1,2,2-Tetrachloroethane	34516	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
1,1,2-Trichloroethane	34511	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
1,1-Dichloroethane	34496	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
1,1-Dichloroethylene	34501	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	7.00
1,1-Dichloropropene	77168	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
1,2,3-Trichlorobenzene	77613	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
1,2,3-Trichloropropane	77443	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
1,2,4-Trichlorobenzene	34551	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	70.00
1,2,4-Trimethylbenzene	77222	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
1,2-Dibromo-3-Chloropropane	38760	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	0.20
1,2-Dibromoethane	81522	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	0.05
1,2-Dichloroethane	32103	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
1,2-Dichloropropane	34541	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
1,3,5-Trimethylbenzene	77226	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
1,3-Dichloropropane	77173	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
2,2 -Dichloropropane	77170	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Benzene	34030	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Bromobenzene	81555	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Bromoform	77297	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Bromodichloromethane	32101	EPA 502.2	4.57	ug/L	0.50	JDA	04/14/95	
Bromoform	32104	EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	

Sample ID : AA63035

PAGE

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYST	ANALYSIS DATE	MCL
Bromomethane	34413		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Carbon tetrachloride	32102		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Chlorobenzene	34301		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	100.00
Chlorodibromomethane	34306		EPA 502.2	1.68	ug/L	0.50	JDA	04/14/95	
Chloroethane	34311		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Chloroform	32106		EPA 502.2	14.44	ug/L	0.50	JDA	04/14/95	
Chloromethane	34418		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Dibromomethane	77596		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Dichlorodifluoromethane	34668		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Dichloromethane	34423		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Ethylbenzene	34371		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	700.00
Fluorotrichloromethane	34488		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Hexachlorobutadiene	38702		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Isopropylbenzene	77223		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Naphthalene	34696		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
Styrene	77128		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	100.00
Tetrachloroethylene	34475		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Toluene	34010		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	1000.00
Total Xylene	34020		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	10000.00
Trichloroethylene	39180		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	5.00
Vinyl Chloride	39175		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	2.00
cis-1,2-Dichloroethylene	77093		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	70.00
cis-1,3-Dichloropropene	34704		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
m-Dichlorobenzene	34566		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
n-Butylbenzene	77342		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
n-Propylbenzene	77224		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
o-Chlorotoluene	77275		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
o-Dichlorobenzene	34536		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	600.00
p-Chlorotoluene	77277		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
p-Dichlorobenzene	34571		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	75.00
p-Isopropyltoluene	77356		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
sec-Butylbenzene	77350		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
tert-Butylbenzene	77353		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	
trans-1,2-Dichloroethylene	34546		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	100.00
trans-1,3-Dichloropropene	34699		EPA 502.2	Not Detected	ug/L	0.50	JDA	04/14/95	

### RESULTS ACCEPTABLE

ug/l : micrograms/liter  
 mg/l : milligrams/liter  
 mg/kg: milligrams/kilogram  
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< : less than  
 MCL: Maximum Contaminant Level  
 MDL: Method Detection Limit  
 LSPC: result less than lower specification  
 USPC: result greater than upper specification

Danny Reed  
 Laboratory Manager (404)853-7962

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION  
455 14th Street, Atlanta, Georgia 30318-7900

LABORATORY REPORT

FILE COPY

TO: <i>Mr. William Vest, City Mgr City of Homerville 200 W Dame Ave. Homerville GA 31634</i>	Date Collected: 09/14/94
	Time Collected: 14:25
	Sample Collector: T WHITE
	Chlorination:
	Sample Type: Routine
Sample ID : AA42160	Received By: BEM
Facility Name: Homerville	Date Received: 09/15/94
Water System ID : 0650000	Time Received: 11:11
Entry Point ID: 301	DW Project: SOC
Entry Point Descr.: WELL #1	Reporting Date: 11/15/94

ANALYTE	PARAMETER CODE	EPA NOTE	METHOD	ANALYSIS				
				RESULT	UNITS	MDL	ANALYST	DATE

PHTHALATES EPA METHOD 506

Butylbenzene Phthalate	34292	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Di(2-Ethylhexyl) Adipate	77903	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	400.00
Di(2-Ethylhexyl) Phthalate	39100	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	6.00
Di-n-Butyl Phthalate	39110	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Di-n-Octyl Phthalate	34596	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Diethyl Phthalate	34336	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Dimethyl Phthalate	34341	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	

NP EPA 507

Aalachlor	77825	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	2.00
Atrazine	39033	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	3.00
Bromacil	04029	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Butachlor	77860	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Metolachlor	39356	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Metribuzin	81408	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Prometon	39056	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Propachlor	30295	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Simazine	39055	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	4.00

EC EPA 508

Aldrin	39330	EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	
BHC-gamma (Lindane)	39340	EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.20
Dieldrin	39380	EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYST	ANALYSIS DATE	MCL
Endrin	39390		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	2.00
Heptachlor	39410		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.40
Heptachlor Epoxide	39420		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.20
Hexachlorobenzene	39700		EPA 508	Not detected	ug/L	0.1	CPC	09/25/94	1.00
Hexachlorocyclopentadiene	34386		EPA 508	Not detected	ug/L	0.4	CPC	09/25/94	50.00
Methoxychlor	39480		EPA 508	Not detected	ug/L	0.4	CPC	09/25/94	40.00
Trifluralin	81284		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	

PCB'S, TOXAPHENE, + CHLORDANE

Chlordane	39350		EPA 508	Not detected	UG/L	0.4	CPC	09/25/94	2.00
PCB 1016	34671		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1221	39488		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1232	39492		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1242	39496		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1248	39500		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1254	39504		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1260	39508		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
Toxaphene	39400		EPA 508	Not detected	UG/L	0.6	CPC	09/25/94	3.00

CARBAMATES EPA 531.1

3-Hydroxycarbofuran	82584		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Aldicarb	39053		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Carb Sulfone	82587		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Aldicarb Sulfoxide	82586		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Baygon	38537		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Carbaryl	77700		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Carbofuran	81405		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	40.00
Methiocarb	38500		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Methomyl	39051		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Oxamyl	38865		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	200.00

PAH EPA METHOD 550

Acenaphthene	34205		EPA 550	Not detected	ug/L	5.0	DJT	11/06/94	
Acenaphthylene	34200		EPA 550	Not detected	ug/L	5.0	DJT	11/06/94	
Anthracene	34220		EPA 550	Not detected	ug/L	0.2	DJT	11/06/94	
Benzo(a)anthracene	34526		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Benzo(a)pyrene	34247		EPA 550	Not detected	ug/L	0.06	DJT	11/06/94	0.20
Benzo(b)fluoranthene	34230		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Benzo(ghi)perylene	34521		EPA 550	Not detected	ug/L	0.03	DJT	11/06/94	
Benzo(k)fluoranthene	34242		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Chrysene	34320		EPA 550	Not detected	ug/L	0.3	DJT	11/06/94	
Dibenzo(ah)anthracene	34556		EPA 550	Not detected	ug/L	0.04	DJT	11/06/94	
Fluoranthene	34376		EPA 550	Not detected	ug/L	0.06	DJT	11/06/94	
Fluorene	34381		EPA 550	Not detected	ug/L	0.5	DJT	11/06/94	
Indeno(123)pyrene	34403		EPA 550	Not detected	ug/L	0.04	DJT	11/06/94	
Phenanthrene	34461		EPA 550	Not detected	ug/L	0.4	DJT	11/06/94	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYSIS		
							ANALYST	DATE	MCL
Pyrene	34469		EPA 550	Not detected	ug/L	0.3	DJT	11/06/94	

**RESULTS ACCEPTABLE**

ug/l : micrograms/liter  
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 mg/kg: milligrams/kilogram  
 ug/kg: micrograms/kilogram  
 ug/g: micrograms/gram

< : less than  
 MCL: Maximum Contaminant Level  
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 LSPC: result less than lower specification  
 USPC: result greater than upper specification

Danny Reed  
 Laboratory Manager (404)853-7962

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION  
455 14th Street, Atlanta, Georgia 30318-7900**

**LABORATORY REPORT**

TO: <i>Mr. William Vest, City Mgr City of Homerville 200 W Dame Ave. Homerville GA 31634</i>	Date Collected: 09/14/94
Sample ID : AA42161	Time Collected: 14:00
Facility Name: Homerville	Sample Collector: T WHITE
Water System ID : 0650000	Chlorination:
Entry Point ID: 302	Sample Type: Routine
Entry Point Descr.: WELL #2	Received By: BEM
	Date Received: 09/15/94
	Time Received: 11:11
	DW Project: SOC
	Reporting Date: 11/15/94

ANALYTE	PARAMETER CODE	EPA METHOD	RESULT	UNITS	MDL	ANALYSIS		
						NOTE	ANALYST	DATE

PHTHALATES EPA METHOD 506

Butylbenzene Phthalate	34292	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Di(2-Ethylhexyl) Adipate	77903	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	400.00
Di(2-Ethylhexyl) Phthalate	39100	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	6.00
Di-n-Butyl Phthalate	39110	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Di-n-Octyl Phthalate	34596	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Diethyl Phthalate	34336	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Dimethyl Phthalate	34341	EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	

NP EPA 507

Alachlor	77825	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	2.00
Atrazine	39033	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	3.00
Bromacil	04029	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Butachlor	77860	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Metolachlor	39356	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Metribuzin	81408	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Prometon	39056	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Propachlor	30295	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Simazine	39055	EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	4.00

EC EPA 508

Aldrin	39330	EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	
BHC-gamma (Lindane)	39340	EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.20
Dieldrin	39380	EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYST	ANALYSIS	
								DATE	MCL
Endrin	39390		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	2.00
Hentachlor	39410		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.40
Hexachlor Epoxide	39420		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.20
Hexachlorobenzene	39700		EPA 508	Not detected	ug/L	0.1	CPC	09/25/94	1.00
Hexachlorocyclopentadiene	34386		EPA 508	Not detected	ug/L	0.4	CPC	09/25/94	50.00
Methoxychlor	39480		EPA 508	Not detected	ug/L	0.4	CPC	09/25/94	40.00
Trifluralin	81284		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	
<b><input type="checkbox"/> PCB'S, TOXAPHENE, + CHLORDANE</b>									
Chlordane	39350		EPA 508	Not detected	UG/L	0.4	CPC	09/25/94	2.00
PCB 1016	34671		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1221	39488		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1232	39492		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1242	39496		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1248	39500		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1254	39504		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1260	39508		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
Toxaphene	39400		EPA 508	Not detected	UG/L	0.6	CPC	09/25/94	3.00
<b><input type="checkbox"/> CARBAMATES EPA 531.1</b>									
3-Hydroxycarbofuran	82584		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Aldicarb	39053		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Aldicarb Sulfone	82587		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Aldicarb Sulfoxide	82586		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Baygon	38537		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Carbaryl	77700		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Carbofuran	81405		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	40.00
Methiocarb	38500		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Methomyl	39051		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Oxamyl	38865		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	200.00
<b><input type="checkbox"/> PAH EPA METHOD 550</b>									
Acenaphthene	34205		EPA 550	Not detected	ug/L	5.0	DJT	11/06/94	
Acenaphthylene	34200		EPA 550	Not detected	ug/L	5.0	DJT	11/06/94	
Anthracene	34220		EPA 550	Not detected	ug/L	0.2	DJT	11/06/94	
Benzo(a)anthracene	34526		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Benzo(a)pyrene	34247		EPA 550	Not detected	ug/L	0.06	DJT	11/06/94	0.20
Benzo(b)fluoranthene	34230		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Benzo(ghi)perylene	34521		EPA 550	Not detected	ug/L	0.03	DJT	11/06/94	
Benzo(k)fluoranthene	34242		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Chrysene	34320		EPA 550	Not detected	ug/L	0.3	DJT	11/06/94	
Dibenzo(ah)anthracene	34556		EPA 550	Not detected	ug/L	0.04	DJT	11/06/94	
Fluoranthene	34376		EPA 550	Not detected	ug/L	0.06	DJT	11/06/94	
Fluorene	34381		EPA 550	Not detected	ug/L	0.5	DJT	11/06/94	
Indeno(123)pyrene	34403		EPA 550	Not detected	ug/L	0.04	DJT	11/06/94	
Phenanthrene	34461		EPA 550	Not detected	ug/L	0.4	DJT	11/06/94	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYSIS		
							ANALYST	DATE	MCL
Pyrene	34469		EPA 550	Not detected	ug/L	0.3	DJT	11/06/94	

**RESULTS ACCEPTABLE**

ug/l : micrograms/liter

mg/l : milligrams/liter

mg/kg: milligrams/kilogram

ug/kg: micrograms/kilogram

ug/g: micrograms/gram

< : less than

MCL: Maximum Contaminant Level

MDL: Method Detection Limit

LSPC: result less than lower specification

USPC: result greater than upper specification

Danny Reed

Laboratory Manager (404)853-7962

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION  
455 14th Street, Atlanta, Georgia 30318-7900**

**LABORATORY REPORT**

TO: <i>Mr. William Vest, City Mgr City of Homerville 200 W Dame Ave. Homerville GA 31634</i>	Date Collected: 09/14/94
Sample ID : AA42163	Time Collected: 14:10
Facility Name: Homerville	Sample Collector: T WHITE
Water System ID : 0650000	Chlorination:
Entry Point ID: 303	Sample Type: Routine
Entry Point Descr.: WELL #3	Received By: BEM
	Date Received: 09/15/94
	Time Received: 11:11
	DW Project: SOC
	Reporting Date: 11/15/94

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYST	ANALYSIS DATE	MCL
<b><input type="checkbox"/> PHTHALATES EPA METHOD 506</b>									
Butylbenzene Phthalate	34292		EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Di(2-Ethylhexyl) Adipate	77903		EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	400.00
Di(2-Ethylhexyl) Phthalate	39100		EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	6.00
Di-n-Butyl Phthalate	39110		EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Di-n-Octyl Phthalate	34596		EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Diethyl Phthalate	34336		EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
Dimethyl Phthalate	34341		EPA 506	Not detected	ug/L	2.0	DSB	09/21/94	
<b><input type="checkbox"/> NP EPA 507</b>									
Alachlor	77825		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	2.00
Atrazine	39033		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	3.00
Bromacil	04029		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Butachlor	77860		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Metolachlor	39356		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Metribuzin	81408		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Prometon	39056		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Propachlor	30295		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	
Simazine	39055		EPA 507	Not detected	ug/L	0.4	JLJ	10/29/94	4.00
<b><input type="checkbox"/> EC EPA 508</b>									
Aldrin	39330		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	
BHC-gamma (Lindane)	39340		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.20
Dieldrin	39380		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYSIS		
							ANALYST	DATE	MCL
Endrin	39390		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	2.00
Heptachlor	39410		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.40
Heptachlor Epoxide	39420		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	0.20
Hexachlorobenzene	39700		EPA 508	Not detected	ug/L	0.1	CPC	09/25/94	1.00
Hexachlorocyclopentadiene	34386		EPA 508	Not detected	ug/L	0.4	CPC	09/25/94	50.00
Methoxychlor	39480		EPA 508	Not detected	ug/L	0.4	CPC	09/25/94	40.00
Trifluralin	81284		EPA 508	Not detected	ug/L	0.04	CPC	09/25/94	
<b>□ PCB'S, TOXAPHENE, + CHLORDANE</b>									
Chlordane	39350		EPA 508	Not detected	UG/L	0.4	CPC	09/25/94	2.00
PCB 1016	34671		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1221	39488		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1232	39492		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1242	39496		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1248	39500		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1254	39504		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
PCB 1260	39508		EPA 508	Not detected	UG/L	0.5	CPC	09/25/94	
Toxaphene	39400		EPA 508	Not detected	UG/L	0.6	CPC	09/25/94	3.00
<b>□ CARBAMATES EPA 531.1</b>									
3-Hydroxycarbofuran	82584		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
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Carb Sulfone	82587		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
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Baygon	38537		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Carbaryl	77700		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
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Methiocarb	38500		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Methomyl	39051		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	
Oxamyl	38865		EPA 531.1	Not detected	ug/L	2.0	SML	10/22/94	200.00
<b>□ PAH EPA METHOD 550</b>									
Acenaphthene	34205		EPA 550	Not detected	ug/L	5.0	DJT	11/06/94	
Acenaphthylene	34200		EPA 550	Not detected	ug/L	5.0	DJT	11/06/94	
Anthracene	34220		EPA 550	Not detected	ug/L	0.2	DJT	11/06/94	
Benzo(a)anthracene	34526		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Benzo(a)pyrene	34247		EPA 550	Not detected	ug/L	0.06	DJT	11/06/94	0.20
Benzo(b)fluoranthene	34230		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Benzo(ghi)perylene	34521		EPA 550	Not detected	ug/L	0.03	DJT	11/06/94	
Benzo(k)fluoranthene	34242		EPA 550	Not detected	ug/L	0.01	DJT	11/06/94	
Chrysene	34320		EPA 550	Not detected	ug/L	0.3	DJT	11/06/94	
Dibenzo(ah)anthracen	34556		EPA 550	Not detected	ug/L	0.04	DJT	11/06/94	
Fluoranthene	34376		EPA 550	Not detected	ug/L	0.06	DJT	11/06/94	
Fluorene	34381		EPA 550	Not detected	ug/L	0.5	DJT	11/06/94	
Indeno(123)pyrene	34403		EPA 550	Not detected	ug/L	0.04	DJT	11/06/94	
Phenanthrene	34461		EPA 550	Not detected	ug/L	0.4	DJT	11/06/94	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	MDL	ANALYSIS	
							ANALYST	DATE

Pyrene	34469		EPA 550	Not detected	ug/L	0.3	DJT	11/06/94
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**RESULTS ACCEPTABLE**

ug/l: micrograms/liter

mg/l: milligrams/liter

mg/kg: milligrams/kilogram

ug/kg: micrograms/kilogram

ug/g: micrograms/gram

< : less than

MCL: Maximum Contaminant Level

MDL: Method Detection Limit

LSPC: result less than lower specification

USPC: result greater than upper specification

Danny Reed

Laboratory Manager (404)853-7962

## **APPENDIX IV**

## U.S. EPA REGION IV

# SDMS

# Unscannable Material Target Sheet

DocID: 10715639 Site ID: GA>A84209431

Site ID: GA DS84209431

Site Name: Brockway Standard

#### **Nature of Material:**

**Map:**

## Computer Disks:

Photos:

## **CD-ROM:**

Blueprints:

## Oversized Report:

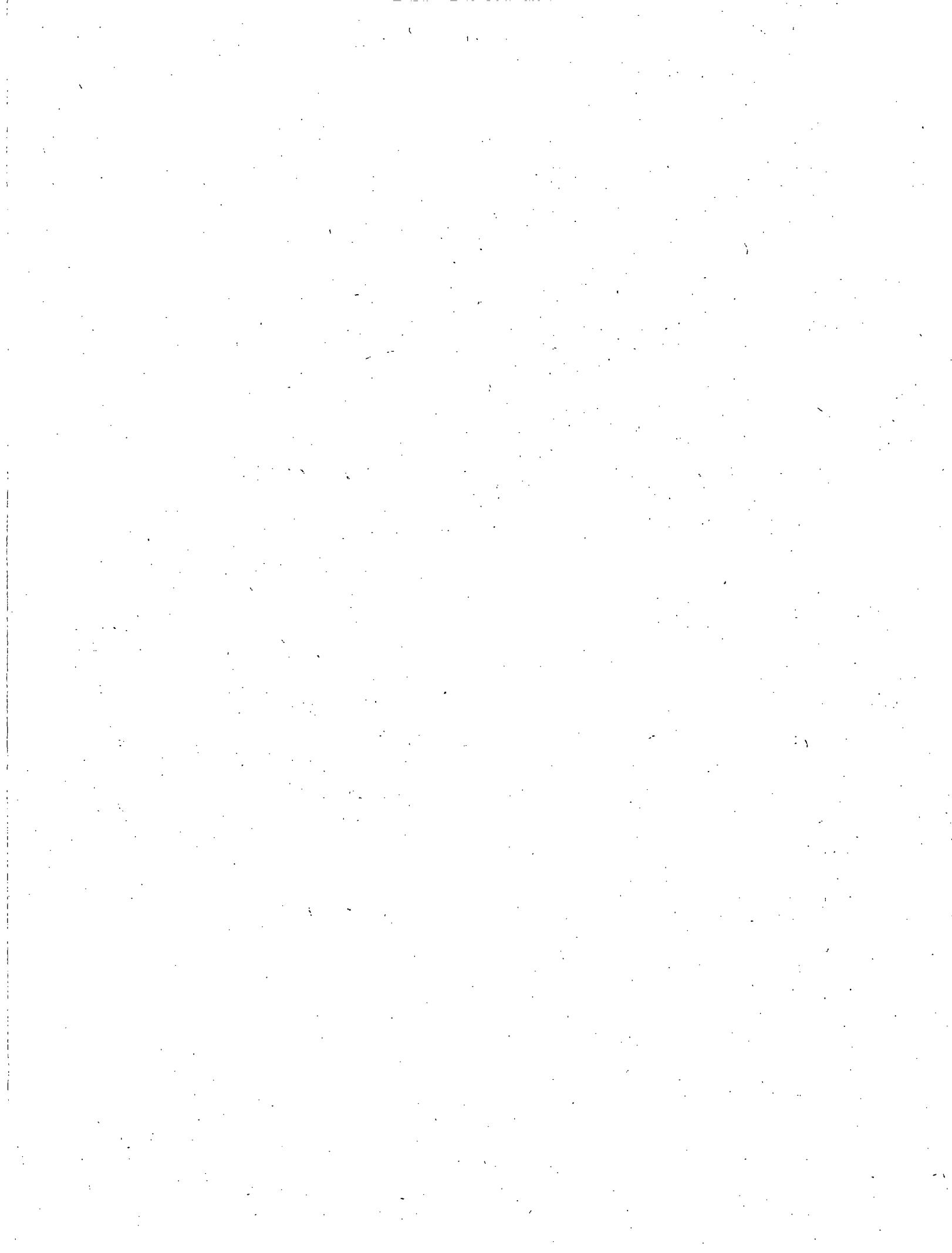
Slides:

## Log Book:

Other (describe): Site Photos (Appendix IV)

Amount of material:

\* Please contact the appropriate Records Center to view the material \*



## **APPENDIX V**

# Georgia Department of Natural Resources

205 Butler Street, S.E., Suite 1162, Atlanta, Georgia 30334

Lonice C. Barrett, Commissioner

Environmental Protection Division

Harold F. Reheis, Director

404/656-2833

April 17, 1996

## **MEMORANDUM**

TO: John McKoewn, EPA

THROUGH: Eddie Williams, Geologist  
Bruce Khaleghi, Unit Coordinator  
Jim Ussery, Program Manager

FROM: Danny Heater, Environmental Engineer <sup>DPA</sup>

SUBJECT: Proposed Sampling Plan for Site Inspection (SI) of Brockway Standard Inc.,  
Homerville, Georgia

Attached is a Sampling Analysis Plan and a site sketch of the site with previous sample locations. This map will assist to pinpoint the sampling locations. The actual locations will be determined during the site reconnaissance.

## Brockway Standard Sampling Plan

**SITE NAME AND LOCATION** Brockway Standard Inc.  
Highway 84 West  
Homerville, Clinch County, GA 31634

**DATE OF TRIP:** April 29, 1996

**PURPOSE OF TRIP:** Site Reconnaissance and Sampling

**SAMPLES TO LAB:** April 30, 1996

**TRIP PERSONNEL:** Danny Heater and Eddie Williams

### DESCRIPTION OF THE SITE:

Based on the results of the Preliminary Assessment (PA) the Brockway Standard Facility, dated 6-30-95, a Site Inspection (SI) is scheduled for April 29, 1996.

A Phase II Environmental Investigation at the Brockway Standard Facility was performed July of 1994. This investigation was performed to characterize the groundwater flow, delineate the horizontal and vertical extent of contamination, and to locate and delineate the contaminant source areas.

After review of the Phase II investigation, the following samples are needed to fully address the SI requirements:

#### Groundwater Samples:

The collection of groundwater samples from two (2) wells downgradient to the south or southwest of the site will be attempted. Actual potential sample locations cannot be determined until the site reconnaissance of the area.

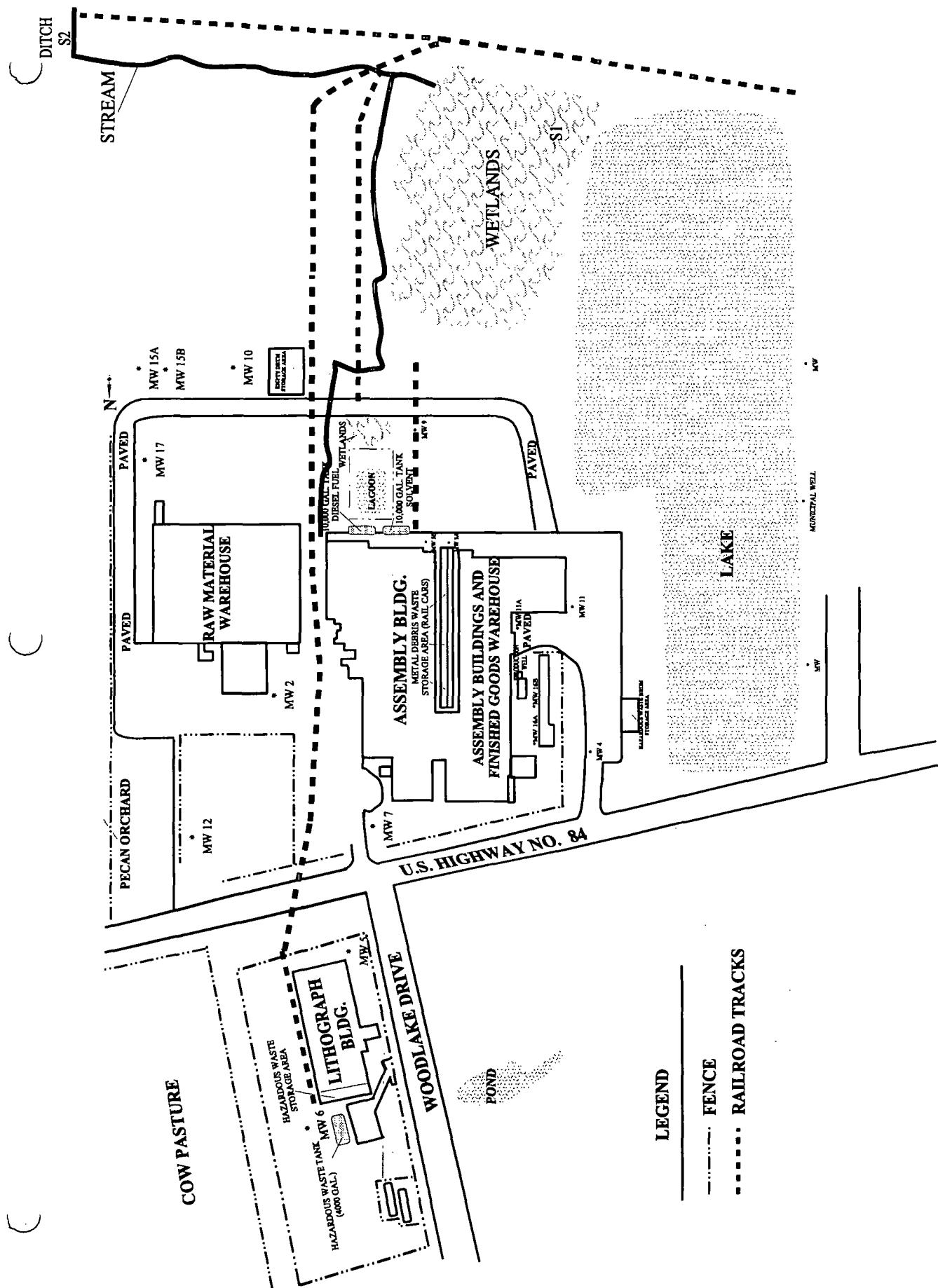
#### Surface Water Samples:

- 2 to 3 surface water samples at a probable point of entry will be collected in areas of observed releases from the site and 1 background surface water sample.
- 3 surfaces water samples were taken in the Phase II; only 1 analysis indicated a small amount of zinc.  
Specific area will be determined during the site reconnaissance.

#### Soil Samples:

- 3 to 4 surface soil samples will be attempted in areas of observed releases.
- During the Phase II, one surface soil was analyzed for VOCs, SVOCs, and metals. Four other samples reported low levels of T-DCE during field GC.

All samples will be analyzed for semi-volatiles, volatiles and metals.



BROCKWAY STANDARD

## **APPENDIX VI**